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Pensions & Investments

The Newspaper of Corporate and Institutional Investing

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AT DEADLINE

Barron quits Virginia

Timothy R. Barron, director of external assets management and former chief investment officer of the $12 billion Virginia Retirement System, Richmond, has left to head up a new Cleveland office for Wyatt Asset Services Inc.

At Wyatt, Mr. Barron has the responsibility of developing a client base in Ohio, Kentucky and western Pennsylvania.

Wisconsin board cleared

State of Wisconsin Investment Board members and staff did not know of former board member Edward Hales' link to a lobbyist who brought real estate investments to the board, according to the board's general counsel.

The review also found the board followed its usual requirements and procedures in the transactions, which appear to be performing satisfactorily.

S. Africa pullout ebbs

Foreign disinvestment from South Africa has slowed significantly since the peak in 1987. So far this year, only seven companies withdrew from the country, compared with 56 in 1987, according to the Investor Responsibility Research Center.

Assets shifting

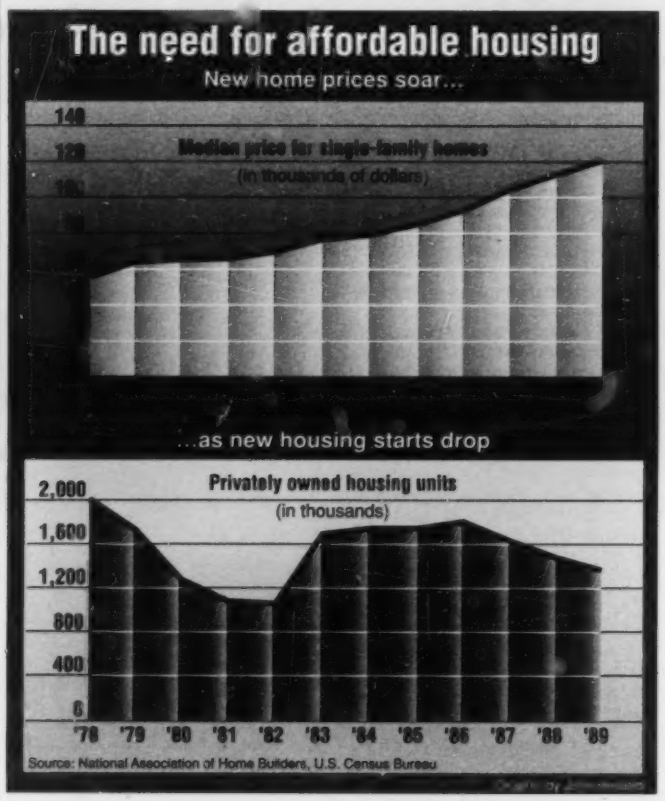
Metro Airlines Inc., Dallas, has hired AMR Investment Services to manage assets in its newly created 401(k) plan . . . W R Lazard & Co. and Smith Barney Capital Management will split evenly and manage separately $610 million of fixed-income assets they have co-managed since 1987 for the New York City Employees and New York City Teachers retirement systems.

INSIDE

Learning the hard way

The perils of using an interest rate swap to cut the expense on a multimillion-dollar debt and reacting with emotions instead of a systematic approach come to life for one Midwestern company. See Commentary, page 16.

Funds on move to house America



Tap local, federal groups as partners

By Joel Chernoff and Hillary Durgin

WASHINGTON — Pension funds are pushing into "affordable housing" for low- and middle-income individuals.

Responding to pressing needs to provide alternative financing for cash-starved and out-of-reach housing markets, pension funds are cautiously moving into these markets in a variety of ways.

Affordable housing is being defined in two ways: the ability to acquire a home, particularly for first-time homebuyers, and the creation of inexpensive rental units for low-income people. Both types of programs hold out great political appeal.

Among the major initiatives:

- The New York City Partnership, a powerful consortium of business and civic leaders, is pressing Housing and Urban Development Secretary Jack Kemp to get the Department of Labor to ease off its requirement that pension funds receive the "prevailing rate" on mortgage investments.

Meanwhile, Rep. Edward Markey, D-Mass., has introduced legislation that would permit collectively bargained single-employer plans to transfer some surplus pension assets into housing assistance programs, a new type of employee benefit authorized by Congress earlier this year.

- Major public pension funds, including those in Pennsylvania and New York City, have made sizable investments in specially designed mortgage-backed securities that aim to make housing more accessible to middle-income workers.
- Union funds — particularly those in the building and construction trades — are boosting investments in this area, especially where they create new jobs for members.

The AFL-CIO Housing Investment Trust, which invests in union-built projects, for example, has seen its assets increase to $311 million as of Sept. 30, up 25% from $248 million a year before. And that doesn't include $80 million in new commitments recently made by state funds in California and Ohio, marking the first time public funds have invested in the trust.

- The General Board of Pensions of the United Methodist Church has allocated $25 million to housing initiatives designed to provide housing to low-income workers.
- The Harvard Management

See **Housing push** *on page 75*

Indiana voters veto stock investments

Indiana voters last week narrowly defeated a state constitutional amendment that would have allowed public pension funds to invest in equities.

And in New York and Connecticut, incumbents won in state races where handling of pension funds had been an issue.

In Indiana, voters rejected by 51% to 49% a constitutional amendment that would have lifted a 139-year-old ban on equity investments by state pension funds. A similar measure was narrowly defeated in 1986.

The amendment would have affected the $3.5 billion Indiana Public Employees' Retirement Fund, the $2 billion Indiana State Teachers' Retirement Fund and the $174 million Indiana State Police Pension Fund. Officials at those funds declined to comment on the defeat.

A study done by William M. Mercer Inc. for the state's Pension Management Oversight Commission had noted additional money the public employees' fund would have made with equity investments through the years (*P&I*, Oct. 30, 1989). Also, teachers' groups had lobbied in favor of the amendment.

With legislation recently passed in West Virginia to allow state pension funds to invest in equities, Indiana and South Carolina are the only states that prohibit stock investments.

In New York, Republican State Comptroller Edward V. Regan narrowly defeated Democrat Carol Bellamy. According to unofficial figures from the New York State Elections Board in Albany, Mr. Regan captured 50% of the electorate compared with Ms. Bellamy's 47%.

Pension-related issues brought up during the campaign included Ms. Bellamy's call for replacing the New York State & Local Retirement Systems' sole trusteeship with a seven-member board of trustees. Mr. Regan is the sole trustee.

Mr. Regan, however, also has called on the Legislature to change the sole trustee system.

Ms. Bellamy, a former president of the New York City Council, also charged Mr. Regan does not review the pension fund's investment managers frequently enough and that the $47 billion fund should invest a portion of its assets in state.

The final days of the campaign became heated with Ms. Bellamy's

See **Election** *on page 73*

The financing subsidiary of IBM Corp. extended its program to the general public and could raise up to $2 billion.

Tapping new wells

Finance subs seek cash from employees

By Marlene Givant Star

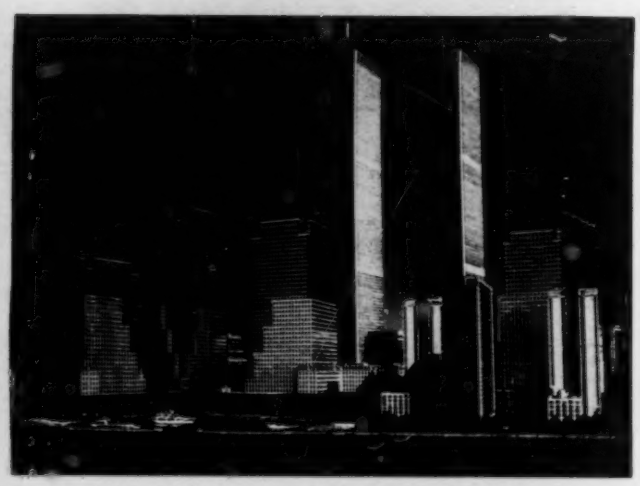
MORRISTOWN, N.J. — Financial service subsidiaries of large U.S. corporations increasingly are looking to employees and the general public as an ample and low-cost new financing source.

On Oct. 23, AT&T Capital Corp. became the fourth finance company to announce a money market account program for current and retired AT&T employees and their immediate families. AT&T registered with the Securities and Exchange Commission $500 million of variable-denomination floating-rate demand notes to be sold through the program.

To date, the three finance com-

See **Employee cash** *on page 73*

NEWS DIGEST



Olympia & York (USA), owner of New York's World Financial Center, is selling a 20% stake in the realty firm to ease the debt burden on its parent company's balance sheet. Page 18.

SPECIAL REPORT: CONSULTANTS

Few clients are scurrying toward asset allocation revisions despite predictions of a gloomy economy, several consultants say. Page 41.

The president of Callan Associates sees a resurgence in defined benefit plans on the horizon. Page 41.

FINANCING

The financing subsidiaries of four major U.S. corporations are turning to employees and the general public as a new source for low-cost capital. Page 1.

The merger of two medical products companies promises to give shareholders a healthy touch in their investment portfolios. Page 12.

INTERNATIONAL

Idaho, Oregon and New Jersey are taking some innovative approaches to foreign investing. Page 2.

The Hungarian economy still suffers the effects of communist rule, making it an inopportune time for pension investment there. Page 2.

REAL ESTATE

Tax-exempt institutional investors are moving toward helping Americans cope with out-of-reach housing markets. Page 1.

Shopping Centers and Pension Funds — a joint venture of *Pensions & Investments* and MONITOR — explores the relationships between the funds and the retail centers in a special section. Page 21.

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Minority addendum scheduled

Pensions & Investments' **will run an addendum to its Oct. 15 directory of minority- and female-owned financial services firm during the first quarter of 1991. Those firms not included in the Oct. 15 issue that wish to be included in the addendum, should call Sabine Schramm at (312) 649-5407 to obtain a questionnaire. The deadline for obtaining a questionnaire is Nov. 30; the deadline for returning the questionnaire is Dec. 10.**

State funds push overseas

New Jersey, Idaho, Oregon innovate in foreign arenas

Three public employee pension funds are making diverse international investment moves.

- The internally managed $30 billion New Jersey Division of Investment will invest $200 million in non-U.S. investments beginning this quarter, and possibly more than $1 billion in the next year in its first international commitment.
- The $11.1 billion Oregon Public Employes' Retirement System bought $4 million of the securities of 10 publicly traded Canadian and British property companies, and has committed another $20 million to its adviser, Alex. Brown Kleinwort Benson, Baltimore, to buy securities of publicly traded property companies in France and Spain.
- The $1.6 billion Public Employees Retirement System of Idaho has revamped its international investments by taking control of the regional allocation and assigning managers to those areas.

New Jersey's first step into international investment is an unusual one, beginning with bonds. Its investments, however, are expected to spread to international equities.

At stake is about $1.3 billion the division may invest internationally. The division is allowed to invest up to 5% of its book value in foreign securities, and foreign equities may comprise up to 40% of that total, or just more than $500 million.

The division already has vaulted such obstacles as the need to hire a New Jersey-based global custodian — Bankers Trust of New Jersey, Jersey City — and has started addressing the need to invest in South Africa-free stocks by sending letters to foreign companies to gauge their level of business in South Africa.

The international move took even firmer root Nov. 7, when Donald Haroz, most recently chief economist/international portfolio strategist with Creditanstalt International Advisers Inc., New York, joined the division as senior international portfolio manager.

At first blush, the timing of New Jersey's initial foreign investing might not seem propitious. For the first nine months of 1990, for instance, the Morgan

See **States** *on page 74*

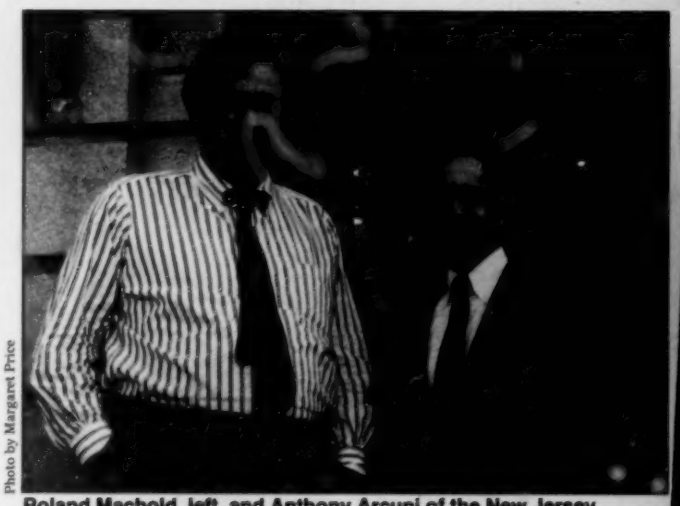

Photo by Margaret Price

Roland Machold, left, and Anthony Arcuni of the New Jersey Division of Investment, which is moving into international investing.

Ontario funds to enter markets

Toronto, the capital of Ontario where billions will be available for capital markets.

By Curtis Vosti

TORONTO — More than $3.5 billion in newly available Canadian pension assets will be invested in capital markets each year for at least the next several years.

The assets come from two Ontario pension funds that were granted freedom this year from the Ontario provincial government — freedom to gain control over their combined assets of more than $21 billion of non-negotiable, non-marketable government debentures and invest it as they see fit. (All figures are in U.S. dollars.)

On Nov. 1, the nearly $7 billion Public Service Pension Board of Ontario began investing its first $65 million into the capital markets. Earlier this year, the Ontario Teacher's Pension Plan Board hired its first two managers.

For each of at least the next three years, the Teacher's Board expects to have available more than $2.5 billion for investments, and more thereafter; the Public Service Pension Board expects to have available nearly $1 billion a year for the next 10 years.

"There's going to be an influx of money into the markets, which will be good for growth," said Michael Butera, a consultant with Segal Advisors Ltd., Toronto.

Canadian pension funds totaled nearly $150 billion in book value at the end of 1989, not including the two Ontario funds, he said, and their influx is expected to be a part of the anticipated doubling of Canadian pension fund investments in the next five years.

Because Canadian law still limits foreign investments to 10% of portfolios (a proposal for a five-step increase to 20% has yet to be enacted), the lion's share of

See **Canada** *on page 75*

Trip opens eyes but not wallets

By Steve Hemmerick

Hungarian government officials got a surprise when visiting Americans — representing 30 pension plans — failed to write out checks for investment in their country.

Pension investors, who in October trekked to Budapest, said they were approached several times by Hungarians asking for the bank checks they thought the Americans would bring.

Robert McLaughlin, assistant director for the $21 billion Ohio Public Employees' Retirement System, said there is a "worldwide shortage of capital" and the Hungarians were "very open" about their need for capital.

But several pension officials said they wouldn't invest directly there or in other Eastern European countries because of lingering damage to the economies.

The decision of plan sponsors not to invest in Hungary immediately was particularly disappointing to Hungarian government officials, said William Gordon, a vice president with Dimensional Fund Advisors, Santa Monica, Calif.

The group, representing $200 billion in tax-exempt assets, was in Budapest to attend Pensions in the '90s IV, a conference hosted by Bear, Stearns & Co., New York.

It was the first conference for U.S. public pension funds ever held in Eastern Europe, said Philip A. Schaefer, a managing director in the San Francisco office of Bear, Stearns, who led the conference. Hungarian officials were virtually "pleading" for capital from the visitors asking directly

See **Hungarian trip** *on page 73*

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Equity ■ Balanced ■ Fixed Portfolios

Administration foils coal board tax plan

By Hillary Durgin

WASHINGTON — Bush administration opposition to a proposed industrywide coal tax has undermined efforts by an independent commission to reach a consensus on how to finance health benefits for mineworkers.

Last week the 12-member, blue-ribbon [illegible] Commission was scheduled to release two separate proposals on how to fund and provide health-care benefits to retired mineworkers and their dependents.

Labor Department officials intervened during the commission's final days, in response to non-union coal company opposition, to say the administration would not accept an industrywide tax as a potential solution, said Henry H. Perritt Jr., vice chairman of the commission and professor at Villanova University School of Law, Villanova, Pa.

The commission, which once unanimously viewed the tax as the only solution to the problem, then scrambled to develop a more palatable option, said Mr. Perritt, who supports the tax. The panel's formal title is the Advisory Commission on United Mine Workers of America Retiree Health Benefits.

"The real loss here is that the commission, made up of private citizens . . . was prepared to exert some leadership and take some risks that perhaps the administration was not in a position to take, and we lost that opportunity," Mr. Perritt said in an interview.

But a Labor Department spokesman said outgoing Labor Secretary Elizabeth H. Dole gave her view on the tax when asked by the commission's chairman.

"She is very conscious of the fact that health benefits and retiree health benefits have always been private-sector matters," said

See **Coal** *on page 72*

CORRECTIONS & CLARIFICATIONS

- A chart ranking **global custodians** by U.S. tax-exempt assets on page 47 of the Oct. 1 issue had an incorrect footnote; there was no double-counting of assets among the firms on that section.
- The following profile was omitted inadvertently from *P&I*'s **Cash Services 1991** issue.

Citizens & Southern National Bank of Georgia, C&S/Sovran Corp.
P.O. Box 4899, Atlanta, Ga. 30302-4899; (404) 581-3108

Collection Services
Lockbox: retail, wholesale, network
Lockbox network: Imagenet and C&S/Sovran wholesale lockbox network
Network: Stand-alone sites
Electronic transmittal of lockbox data
Saturday/Sunday processing
Disbursement Services
Controlled with delayed funding reports presented at 8:30 a.m. and 10 a.m.
Authenticity verification: PIN numbers and automated call back
Information Services
Services Offered (terminal initiated): Wire transfers; stop payments; letters of credit; ACH transactions; CHIPS and SWIFT.
TABRS: In-house
Same-day reporting
Next-day reporting
ACH capability
CCD originate/receive
CCD+ originate/receive
CTP originate/receive
PPD originate/receive
CTX originate/receive
International Services
Foreign exchange trading
Consulting Services
Stand-alone consulting unit
Investment Management Services
Sweep and separate accounts
Other Services
NCCMA account analysis standard: 1st quarter, 1991
Transmission of account analysis in ANSI standards
Account reconciliation system: DISC
Other financial EDI service
Charges
BECR: 7.8%
Compensating balances required to offset $100 in fees: $17,700
Bank Information
Chief corporate cash management executive: Rhen Cain, executive vice president
Contact person: John Parker, vice president

The Oregon Public Employes Retirement System

has completed the conversion of its international assets to

Morgan Stanley Trust Company

as Global Custodian in association with

First Interstate Bank of Oregon

as Master Custodian

Morgan Stanley Global Securities Services
1251 Avenue of the Americas, New York, New York 10020
(212) 703-4432

Morgan Stanley Trust Company
1 Evertrust Plaza, Jersey City, New Jersey 07302
(201) 915-3901

The Oregon Public Employes Retirement System and **First Interstate Bank of Oregon** have appointed Morgan Stanley Trust Company sole global custodian for the $1.1 billion in overseas equities and debt securities in its pension fund.

The challenge was to create a fully automated network linking The Oregon Public Employes Retirement System; twelve fund managers (including one in Paris, one in Frankfurt and two in London); two consultants; a securities lending function in Los Angeles; and First Interstate Bank of Oregon.

The advanced technology and dedicated personnel of Morgan Stanley assured both that the system would be capable of fully integrating the services required, and that the conversion would be smoothly managed from start to finish.

Morgan Stanley Global Securities Services is continually redefining the quality of global custody and its standards of service. We currently support institutional investors in 30 countries, with fixed income and equity assets of more than $14 billion.

TRADERS

CBOT group eyes animals' futures

■ Some members of the Chicago Board of Trade are investing in a different kind of future — the future of endangered species.

A group of traders, concerned about the environment, set up the Chicago Board of Trade Endangered Species Fund in December 1988. Since then, the fund has raised $100,000 from 134 CBOT members to support the Chicago Zoological Society's conservation efforts. Trustees recently authorized the first grants from the fund.

A total of $2,000 will go toward publication of a manuscript concerning the international conservation of wild sheep and goats; $2,000 toward publication of a book detailing the proceedings of a recent conference, co-sponsored by the society, on management and conservation of small populations; and $1,500 toward a Costa Rican rain forest project of the Chicago Rainforest Action Group.

"A number of members just felt we should do something," said Jerry Manne, an independent trader on the fund's advisory committee and a Zoological Society trustee. "There's a lot more interest around the world in the environment." Other committee members are Frank DiMaria, Ralph Goldenberg, Roger Griffin, Ed Krasjewski Sr. and Alan Zatopa, all CBOT traders.

The advisory committee will continue to review conservation projects in need of funds and make recommendations to the Zoological Society trustees.

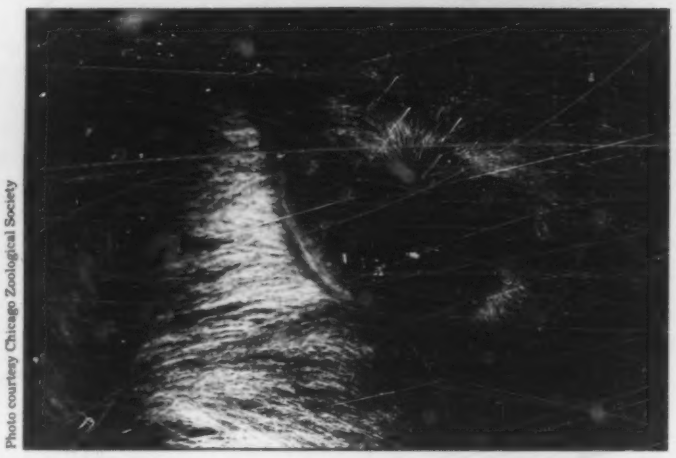


Photo courtesy Chicago Zoological Society

Chicago Board of Trade members have contributed to preservation of a rain forest in Costa Rica, where such species as the two-toed sloth dwell.

Photo by Michael Marcotte

L.B. "Tom" Thompson rejoins his former Ameritech boss.

PEOPLE

Ameritech loses 2nd fund exec

■ Lloyd B. "Tom" Thompson has left as director-real estate of the pension fund for American Information Technologies Corp., Chicago, a company spokeswoman confirmed.

Mr. Thompson joins Equity Financial and Management Co., Chicago, where he will be reunited with Don Phillips, former chief investment officer of Ameritech. The two men will work together marketing The Equity Group's investment subsidiary, Equity Institutional Investors to institutional investors.

Equity Institutional Investors will solicit institutional investors for the Zell/Chillmark equity fund and the Zell/Merrill Lynch II real estate fund.

Ameritech also has hired Heitman Advisory Corp. to oversee its real estate investments, according to pension professionals familiar with the company.

CORPORATIONS

This isn't a form letter, but . . .

■ It's the next best thing to canned speeches, something every corporate director and officer will find handy and essential, the publisher says.

Don't waste valuable time crafting letters to shareholders, employees, customers and suppliers who raise concerns about the companies you watch over. Buy "The Director's and Officer's Complete Letter Book," published by Prentice-Hall. It even comes with a guarantee that you'll get the results you want.

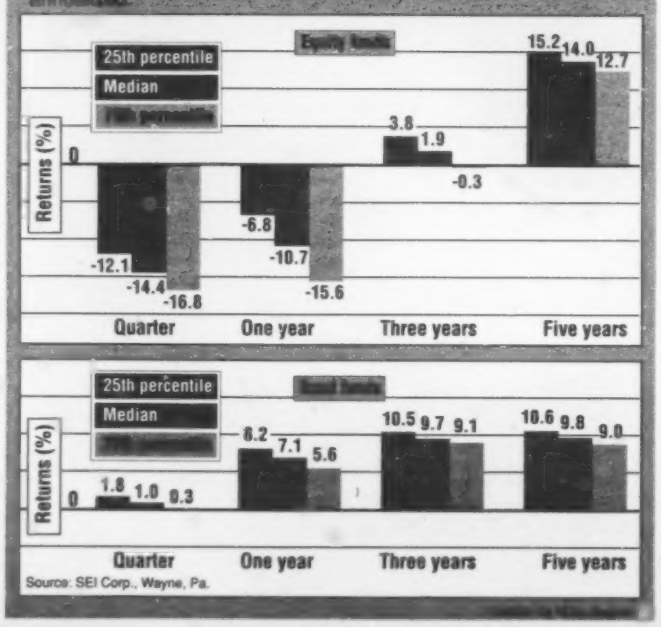
The book will provide a standard source for all letters and replies dealing with a wide variety of subjects. According to the marketing material, the book provides 133 letters and 988 alternate phrases, sentences and paragraphs. The latter can be mixed and matched to create just the right letter or reply.

Among other things, the book features 10 letters for special situations with 114 alternate paragraphs, nine letters to stockholders with 35 alternate sentences and paragraphs, and 13 letters to gain employee cooperation with 78 alternate sentences and paragraphs.

SEI universe performance

(Periods ended Sept. 30)

The S&P 500 Stock Index returned -13.8% for the quarter, -9.2% for the year, 1.9% for three years and 14.9% for five years. The Salomon Brothers Broad Index returned 1%, 7.7%, 10.7% and 10.4% respectively. Returns for periods greater than one year are annualized.



Source: SEI Corp., Wayne, Pa.

RETIREE MEDICAL

Hewitt study confirms expectations

■ To no one's total surprise, a new survey by Hewitt Associates found the median annual expense for retiree medical care will rise dramatically when the new Financial Accounting Standards Board accounting rule for post-retirement medical benefits becomes effective in 1993.

According to Hewitt, the median annual medical cost for retirees is 1.1% of active payroll. Under the new rule, the median annual expense is expected to jump to 6.25% of payroll. The FASB accounting rule will require firms to convert from the current pay-as-you-go accounting to an accrual basis.

The Hewitt survey of 463 medium and large employers nationwide also found only 11% of employers are pre-funding for retiree medical benefits.

According to the survey, the median annual cost for plans covering retirees under age 65 is $2,246 per retiree and $1,033 for retirees after age 65 (when Medicare is the primary source of coverage). The median per-retiree FASB expense reported by employers is $9,464.

About half (49%) of surveyed employers have estimated their retiree medical liabilities under the proposed FASB standards.

FASB is expected to give its final approval to the new accounting regulation in November.

Investment management median fees (in basis points)

Portfolio size	Equity	Fixed income	Balanced
$10 million	73	45.00	65.0
$25 million	60	38.58	59.0
$50 million	55	32.00	50.0
$100 million	50	28.00	43.5
$150 million	50	27.00	40.0

Source: Quan-Vest Consultants Inc., Manhasset, N.Y.

MANAGERS

Fees rose almost 8% during year

■ Investment management fees rose an average of 7.9% during the 12 months ended June 30, according to a random survey of 82 money managers by Quan-Vest Consultants Inc., Manhasset, N.Y.

The survey found equity managers increased fees an average of 9.8%, while fixed-income managers boosted fees an average of 9.1%. Balanced managers increased fees 5.2%. Most of the fee hikes were incurred for accounts of $50 million or more. The fee schedules represent those proposed to new accounts.

INVESTING

Bankers put twist in bond portfolio

■ High-yield bonds may be on the outs, but investment bankers are still dreaming up ways to market them.

Institutional investors recently purchased a portfolio of high-yield corporate bonds of 47 issuers in 22 industries.

This is the first time a collateralized bond obligation includes deferred interest bond collateral in its portfolio. A deferred interest bond is a debt instrument that accrues interest for a specified number of years before paying a fixed cash coupon.

U.S. Treasury strips were purchased to fill in the missing coupon payments during the deferred interest bond's accrual period. The resulting synthetic security is initially of higher credit quality than the deferred interest security because of the guaranteed cash flow stream from the Treasuries, according to Moody's Investors Service.

Other similar deals are in the pipeline, according to Andre Kosovych, managing director, Donaldson, Lufkin & Jenrette Inc., which privately placed the securities with insurance companies and money managers.

To date, only about 20 securitized high-yield deals have been done. Most of the securities were privately placed in Europe.

In this transaction, Moody's assigned a rating of Aa2 to the Class A bonds and a rating of Baa3 to the Class B bonds of Fountain CBO Partners L.P. The Class C bonds and the limited partnership interests are unrated. Fountain Capital Management, Overland Park, Kan., is the collateral manager.

INTERNATIONAL

Boatmen's Trust picks new adviser

■ Boatmen's Trust Co. chose Kleinwort Benson International Investment Ltd., New York, to replace Morgan Grenfell Investment Services Ltd., London, as adviser for $130 million in international equity investments, including about $110 million from institutions.

Thomas Darnall, senior vice president and chief equity investment officer at Boatmen's, St. Louis, said the change was made because Kleinwort Benson's approach was more similar to the bank's and the firm had a better record than Morgan Grenfell.

Shopping
Centers
&
Pension
Funds
Partnership for

By Robert E. O'Neill/Steve Hemmerick

Pension funds are significant players in real estate generally and retail specifically. And the importance of pension funds as suppliers of capital for the shopping center industry is increasing as many troubled banks and savings and loan associations are, effectively, taking themselves out of the real estate lending market.

As of June 30, tax-exempt investors—of which pension funds are the major component—had invested $104 billion in equity real estate and almost $19 billion in hybrid debt, such as participating or convertible mortgages.

These amounts represent investments through real estate money managers and/or investment advisers, however. The amount of pension money in real estate actually is higher, because many of the bigger investors—including some of the jumbo public funds sponsored by state and municipal governments—invest directly rather than through advisers.

About 21 percent of advisers' assets under management were invested in retail properties as of June 30.

During the past several years, pension investors have battled each other in bidding wars that helped drive up prices for malls. They did this as they shifted their attention away from the poor-performing office building sector, once their staple real estate investment.

Some investors have been buying regional malls with capitalization rates in the 4.5 percent to 5.5 percent range, a drop of several percentage points from a few years earlier. They've been willing to pay high prices for malls partly because prices climbed to even higher levels.

As prices increased, so did appraised values of properties purchased earlier. The result was sharply higher investment returns because appreciation is one of the two components of return (income is the other).

Indeed, investors got tremendous returns as mall prices skyrocketed, says Terrance R. Ahern, principal of The Townsend Group, a real estate consulting firm in Cleveland. And the increased returns generated increased interest among pension funds in retail property.

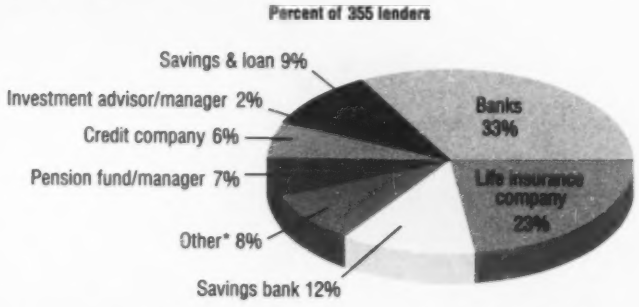
But changing economic and retail market fundamentals mean some pension funds now will have a "greater feeling [it's] not the time to be in high-quality retail," says Gregory A. White, managing director of real estate finance for Salomon Brothers Inc. of New York.

Pension funds and their real estate money managers or

WHEN IT COMES TO INCOME PROPERTIES:

Out of 355 lending institutions, commercial banks are the most frequent lenders for income-producing properties. It is these banks that developers say are increasingly reluctant to provide financing, especially for construction loans. Developers and retailers are looking elsewhere, especially to pension funds, for alternate ways of financing.

WHO MAKES THE LOANS...



**Other, in descending order of frequency: investment company/private lender, REIT, syndication/partnership, investment bank/banker and miscellaneous.*

Source: *Fleet's Guide*, 1990 edition

Here is the degree of interest expressed by lenders in income properties with retail potential. For the second half of 1990, interest by lenders declined for all 33 types of income properties surveyed, compared with the first half of 1989. Yet strip shopping centers with anchors are ranked second highest in interest by these banks, thrifts, life insurance companies, pension funds and credit companies. (Interest in multi-tenant office properties was higher, but only by about 1 percent.)

WHAT KINDS OF PROPERTY LENDERS ARE INTERESTED IN...

1990 rank	Property	Percent of lenders expressing interest: Jan./June 1989 (299 institutions)	July/Dec. 1990 (251 institutions)	% of relative change*
2	Strip center with anchor	90.0%	80.1%	−11.0%
8	Enclosed mall	59.5	51.0	−14.3
10	Strip retail without anchor	47.8	35.3	−26.1
12	Office over retail	38.8	29.3	−24.4
20	Raw land with development plan	23.4	15.1	−35.5
32	Raw land without development plan	5.0	3.1	−37.5

**The absolute change between the two periods divided by the Jan./June 1989 figure, reflecting the intensity of the decline.*

Source: *Fleet's Guide*, 1990 edition.

advisers had been predicting "a rosy economy, sustained increases in sales and anchor tenants who stayed in business," says White. But now the economy could be headed for a recession, sustained sales increases are unlikely, and some anchor departments are unhealthy and may go out of business.

There is good news for some investors: The income stream for most malls will remain steady, White says, and the credit quality of their tenants will remain high. And steady income and good credit tenants would benefit investors who bought at cap rates of 8 percent or 9 percent, he notes.

But if the buyers paid high prices that provided returns of 4.5 percent and 5.5 percent, "you are going to look wrong, relatively quickly," predicts White.

Retail returns already are slipping. Retail properties posted a total return of 9.4 percent for the year ended June 30, 1990 vs. 13.9 percent for the year ended June 30, 1989 and 13.2 percent for the previous one-year period, according to the Russell-NCREIF* Property Index.

A return of over 9 percent is strong, but is down from the 12 percent return the index reported for retail for the three years ended June 30, 1990. Also, the 9.4 percent return includes the returns from some malls purchased before the run up in mall prices.

Pension fund executives, consultants and investment advisers aren't unanimous about how higher prices and lower returns for retail affect pension funds' attitudes toward investing in retail.

It's likely pension funds will start backing off from buying malls, Townsend's Ahern says. However, he adds, "I have seen more advisers starting to take a long look at community shopping centers."

Leanne Lachman, head of acquisitions and managing director for Schroder Real Estate Associates, New York, says pension funds continue to want to buy investment-grade malls, or large malls with several strong anchors and high sales. Those retail properties—especially super regional malls—are owned by well-capitalized institutional owners and don't come up for sale often. In fact, the most recent sale she remembers to an institutional investor was in June 1980.

Some pension executives still exhibit sincere interest in buying retail properties, asserts Frank Sullivan, a managing director with Jones Lang Wootton Realty Advisors, New York. He concedes interest has waned among other pension officials because of falling returns and dim short-term prospects for real estate.

"I think some of them have chosen to adopt the long-term philosophy that as long as we are properly underwriting, our goal is to assemble the portfolio over time. And if pricing is a little bit better this year, because cap rates are down, or if underwriting is a little more conservative, that is actually a better time to buy," Sullivan says.

Looking Ahead

As shopping centers enter a new decade, they face an ever-changing array of challenges. In *Monitor's* Fourth Annual Report of the Shopping Center Industry (April 1990), developers rated 26 potential problems for the year ahead. At the top were environmental constraints, local economic conditions and land costs, followed by impact fees, vacancy rates and public opposition to expansion.

Not included in the list was today's most pressing problem. So swiftly has the credit crunch evolved that the survey did not even ask about obtaining financing.

In a recent International Council of Shopping Centers (ICSC) survey, 450 developers who had applied for construction loans in the previous six to nine months reported that their lenders had changed their lending practices drastically. Excessive documenting requirements were most lamented, followed by higher equity

. . . AND UNDER WHAT TERMS

Source: *Fleet's Guide*, 1990 edition

*National Council of Real Estate Investment Fiduciaries

SHOPPING CENTER OPERATING PERFORMANCE

	SUPER REGIONAL (103 centers in sample)		REGIONAL (69 centers in sample)	
Base data	**Area in square feet**	**% of total area**	**Area in square feet**	**% of total area**
Center size (total occupancy area)	1,080,625	100.0%	518,271	100.0%
Unowned occupancy area	525,047	48.6	199,380	38.5
Department stores (owned & unowned)	601,157	55.6	230,004	44.4
Tenant data*	**Mall area in square feet**	**% of total**	**Mall area in square feet**	**% of total**
GLA of shops	393,400	36.4%	285,547	55.1%
Tenant sales	**Dollars per square foot of mall GLA**		**Dollars per square foot of mall GLA**	
	$219.23		$182.80	
Operating Results	**Dollars per square foot of mall GLA**	**% of total receipts**	**Dollars per square foot of mall GLA**	**% of total receipts**
Operating receipts				
Rental income—minimum	$12.31	56.6%	$8.68	55.4%
Rental income—overages	2.03	9.3	1.50	9.6
Total rent	14.34	65.9	10.18	64.9
Common area charges	3.16	14.5	2.06	13.1
Property taxes	1.48	6.8	.81	5.2
Insurance	.25	1.1	.10	.6
Other escalation charges	1.29	5.9	2.01	12.8
Income from sale of utilities	2.24	10.3	1.75	11.1
Total other charges	3.83	17.6	3.01	19.2
Miscellaneous income	.59	2.7	.60	3.8
Total operating receipts	**$21.75**	**100.0%**	**$15.68**	**100.0%**
Operating expenses				
Building maintenance	$.70	3.2%	$.45	2.9%
Parking lot, mall, other common areas	2.91	13.4	2.30	14.7
Central utility systems	1.43	6.6	1.24	7.9
Office area services	.39	1.8	.19	1.2
Total maintenance & housekeeping	4.63	21.3	3.47	22.1
Advertising & promotion	.32	1.5	.33	2.1
Real estate taxes	1.46	6.7	1.95	12.4
Insurance	.30	1.4	.18	1.1
General & administrative	1.77	8.1	1.82	11.6
Management agent fees	.72	3.3	.43	2.7
Leasing agent fees	.14	.6	.10	.6
Total operating expenses	**$8.41**	**38.7%**	**$6.82**	**43.5%**
Net operating balance**	**$13.34**	**61.3%**	**$8.86**	**56.5%**

*Excludes mall department stores.

**Total net operating balance does not account for depreciation, amortization, taxes and deferred costs.

● Big, bold, brash and frequently beautiful, **super regional shopping centers**—malls—provide an extensive variety of goods comparable to those of the central business district of a major metropolitan area, including a wide selection of general merchandise, apparel and home furnishings, as well as a variety of service and recreational facilities. The major occupants of a super regional center include at least three full-line department stores, each with an area of not less than 100,000 square feet. In this sample of 103 super regional centers, almost half of the department stores are physically a part of the center but are independently owned. Department stores generate some $155 million in sales.

● **Regional shopping centers**, usually enclosed malls, average about half the size of super regional malls, and offer an extensive line of goods and services similar to those of the central business district of a small city. Major occupants of a regional center include at least one, but no more than two full-line department stores, each at least 100,000 square feet in size. The proportion of unowned department stores is less than for super regionals, 38.5 percent vs. 48.6 percent.

● **Community centers** offer fewer goods and services than

COMMUNITY (265 centers in sample)		NEIGHBORHOOD (271 centers in sample)	
Area in square feet	% of total area	Area in square feet	% of total area
186,005	100.0%	66,854	100.0%
—	—	—	—
—	—	—	—
Area in square feet	% of total		% of total
164,723	88.6%	64,228	96.1%
	Dollars per square foot $176.33		Dollars per square foot $199.37
Dollars per square foot of GLA	% of total receipts	Dollars per square foot of GLA	% of total receipts
$5.66	74.5%	$6.49	78.3%
.59	7.9	.71	8.6
6.14	80.8	6.89	83.1
.70	9.2	.65	7.8
.51	6.7	.64	7.7
.22	2.9	.12	1.4
.19	2.5	.28	3.4
.29	3.8	.20	2.4
.79	10.4	.80	9.7
.13	1.7	.15	1.8
$7.60	100.0%	$8.29	100.0%
$.18	2.4%	$.33	4.0%
.59	7.8	.59	7.1
.27	3.6	.23	2.8
.85	11.2	.27	3.3
—	—	.96	11.6
.15	2.0	.19	2.3
.67	8.8	.79	9.5
.16	2.1	.19	2.3
.72	9.5	.91	11.0
.31	4.1	.34	4.1
.15	2.0	.20	2.4
$2.48	32.6%	$2.86	34.5%
$5.12	67.4%	$5.43	65.4%

Note: Because data are medians, detail amounts do not add to totals.
Source: *Dollars & Cents of Shopping Centers: 1990*, Urban Land Institute, Washington, DC

regional centers, but considerably more than neighborhood centers. Anchors typically include a junior department store, variety store or discount department store, and the center may offer banking and professional services and recreational facilities.

● *Smallest in size, averaging about 66,800 square feet,* **neighborhood centers**—*i.e., convenience strip centers—provide for the sale of daily living needs—convenience goods like food, drugs, hardware and personal services. A supermarket or drugstore is most often the principal tenant of these strip centers. Annual sales average to about $13.3 million.*

requirements and additional collateral on existing loans.

Developers also found that loans were smaller, and interest and fees higher. Lenders proved unwilling to finance joint/equity ventures, to renew or extend existing loans or to make loans at all. Said one New Jersey developer, "Even for worthwhile projects, trying to find money today is a hellacious experience."

T-bills vs. Properties

Overreaction by bank and thrift regulators is the culprit by almost all accounts. "The S&L situation is having an impact, without doubt," says Mark N. London, president and CEO of Equity Properties and Development Co., Chicago. "It's highly visible and gets intense media attention. Retail is one of the smallest portions of its problems, but takes a beating because of guilt by association."

With traditional sources drying up, pension funds seem a natural place to turn. But at a recent roundtable sponsored by *Pensions & Investments*, where the pros and cons of real estate investment were explored in depth, a key question posed was, "Why should fund owners and managers invest in real estate these days when they can get a better return on Treasury bills?"

Deja vu, says panel member Ken Codlin, investment officer for the Illinois State Universities Retirement System in Champaign. "In the early 1980s, exactly the same question was being asked about stocks and bonds: Why invest in stocks and bonds when you can get these wonderful 15 percent returns on T-bills? That was just before one of the major bull markets of the century began in both stocks and bonds, and those funds that took that advice regretted it. It's important for most investors, and for pension funds in particular, to try to look across the chasm of temporary troubles and ask what are, really, the long-term prospects."

As a developer and seller of real estate properties, Richard Welcome, executive vice president for retail development of Homart Development Co., Chicago, cites his experience: "We recently went back and looked at some of the developments that we have done over the past 15 years—some of them undertaken at similar timing such as today's—and the returns over a six- to 10-year period were far in excess of what one would have achieved in Treasury bills."

Joel R. Wilson, senior vice president of real estate for GE Investments, headquartered in Stamford, CT, says his company's returns are consistently good. "If you disaggregate the Russell Index and look at retail and industrial, dropping office out, those two sectors have outperformed T-bills over every period. I just went back for 1989, and somewhere close to 80 percent of our

investments in retail and industrial outperformed the T-bill rate."

Townsend's Ahern, agrees, saying, "The assumption that real estate cannot compete effectively with treasuries is incorrect. Through a careful selection process you can, at a minimum, attain returns competitive with treasuries and stocks and bonds."

How Good a Hedge?

"Real estate is a good investment for reducing overall portfolio volatility," Ahern says, adding that shopping centers' particular value as a recession and an inflation hedge is directly related to tenant mix. "If you have national credit tenants, you are able to negotiate long-term leases with relatively few ups. That provides you a base against recession. But it does not provide you with capacity to adjust relative to inflation," he adds.

For example, he says, "If a market is substantially overbuilt and you hit an inflationary period without

HOW FUNDS WILL INCREASE EQUITY REAL ESTATE INVESTMENT

Change in projected asset mix

Type change	No. of funds	$ millions	% of total assets 1989	% of total assets 1992*	Point change
Corporate funds	1,455	$51,072	5.8%	7.0%	+1.2
Public funds	370	34,915	4.7	6.5	+1.8
Multi-employer funds	84	3,909	6.2	9.7	+3.5
Endowments/foundations	182	3,921	3.3	3.6	+0.3
Total funds	**2,091**	**$93,817**	**5.2%**	**6.3%**	**1.1%**

*Projected

Source: Greenwich Associates

Based primarily upon almost 1,500 hour-long personal interviews, the results here clearly call for across-the-board increases in real estate investment by pension funds by 1992. Relative increases are higher than point increases shown. For example, the 1.1 percent gain for all funds translates to a 21 percent relative gain for the period.

HOW DEVELOPERS RATE PROSPECTS OF SHOPPING CENTER TYPES

"Business prospects over the next several years, 1986-1989"

Overall index*	1986	1987	1988	1989	4-year average
By type of center					
Neighborhood	59	63	50	59	
Community	57	62	59	61	
Regional	39	47	52	51	
Super regional	33	43	48	47	
By characteristics					
Open (strip) centers	62	66	59	64	
Mixed-use centers	48	51	52	49	
Enclosed centers	44	50	51	51	
Adaptive reuse	41	43	43	44	
Vertical (urban) malls	25	36	41	35	
Festival marketplaces	31	37	36	31	
By positioning					
Traditional tenant mix	59	41	59	61	
Discount	47	53	57	62	
Fashion-oriented	45	51	49	50	
Theme/specialty	44	45	45	44	
Off-p... /factory outlet	36	40	46	52	
Catalog showroom	27	33	35	37	

*Respondent ratings of poor to excellent converted to an index from 0 (poor) to 100 (excellent).

Source: Monitor, Annual Report of the Shopping Center Industry, April 1989.

Developers were asked to rate the business prospects of different types and positioning of centers as excellent, fair or poor. Here's how they responded over a four-year period. Ratings lately have improved noticeably for regional and super regional centers, discount and off-price/factory outlet centers. Nonetheless, traditional tenant mix centers account f... more than eight in 10 of total.

Circle No. 68 on inquiry card

HOW FUNDS INVEST

Developers and others wishing to sell properties to pension funds likely should deal with real estate money managers and investment advisers. Staffs of most pension funds are lean, and they don't have enough expertise to handle all facets of real estate investment.

As a result, they generally use investment management consultants to help them screen and select real estate advisers, then depend on their advisers to screen and purchase properties.

Pension funds invest in real estate through advisers in two basic ways—through commingled pools along with many other investors and on their own through direct, separate accounts.

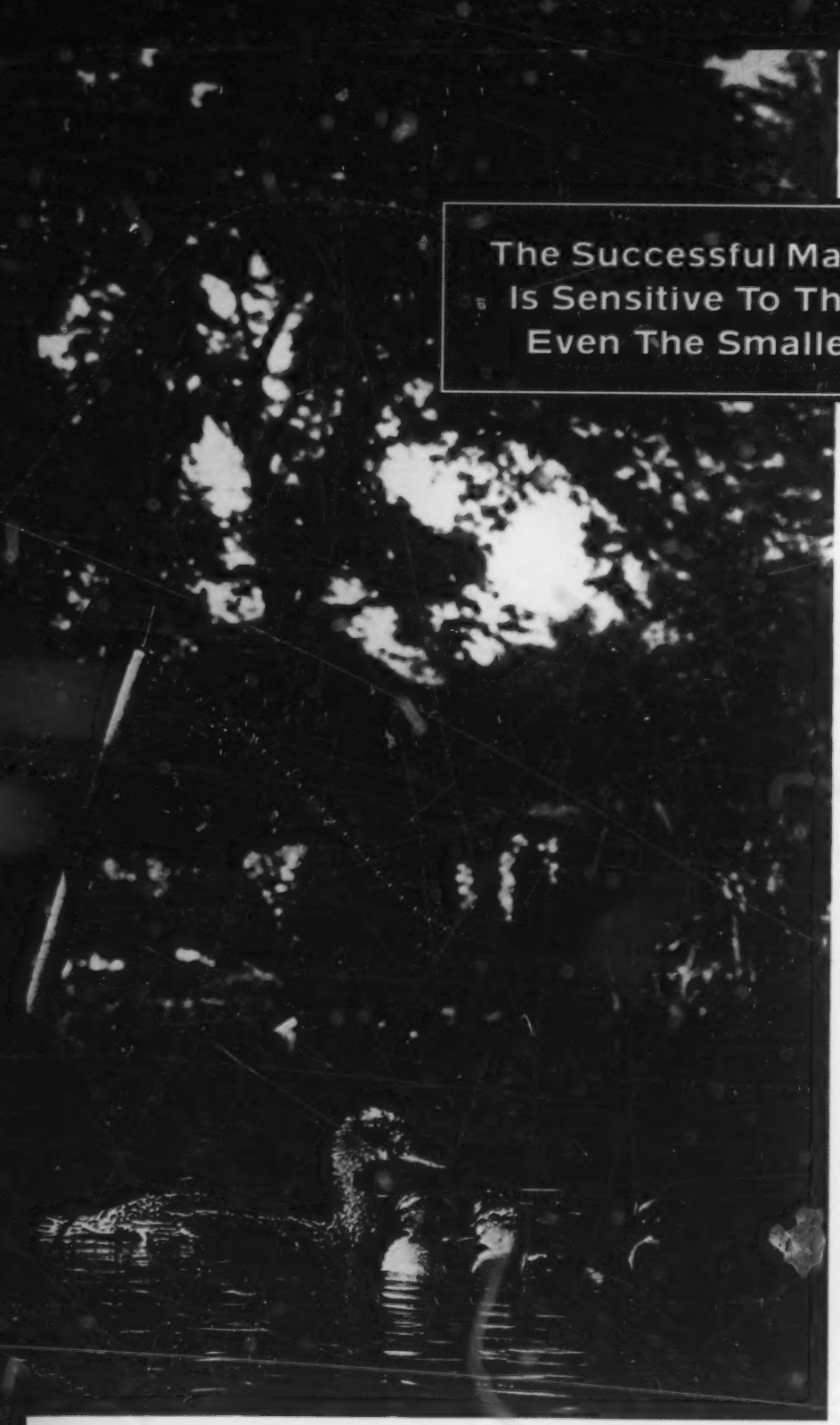
Commingled funds are a trust or limited partnership in which the adviser acts as the general partner, buying properties on behalf of a group of investors.

Pension funds began by investing in open-end funds—the best known is PRISA—that now are thought of as being core real estate investments that behave almost like real estate index funds. Then, as investors' knowledge of, and comfort with, real estate as an asset class increased, they moved to closed-end funds, and finally, to separate accounts.

The primary difference between open-end and closed-end funds is the liquidity available to investors. Open-end funds typically allow investors to add or withdraw assets on a quarterly basis; a closed-end fund usually has a subscription period and pre-specified holding period, generally about 10 years.

In a separate account, a pension fund hires an adviser to purchase investment-grade properties only for that fund. In that way, pension executives often feel they have more control over the adviser and the assets, because, along with the money, they can give the adviser specific guidelines on, for example, geographic and property mixes. Often, the pension fund staff must give final approval on any separate account investment made on the fund's behalf.

This year, according to *Pensions & Investments'* data, separate accounts overtook commingled funds as the investment of choice for pension funds, although the gap had been narrowing for several years.



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If our retailers aren't successful, neither are we. That's why we're so careful to look out for them and to find ways to provide them with better service.

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We listen to our tenants—both large and small. And we respond. It's called building trust. And, Homart has been doing it for more than 30 years.

Homart Development Co.

BUILDING TRUST

The commercial development arm of the Coldwell Banker Real Estate Group. A member of the Sears Financial Network. © 1990 Homart Development Co.

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growth in employment . . . and if you do have a substantial number of vacancies, it gives the small tenant the ability to negotiate from a stronger standpoint than if the vacancies weren't present." That's a drawback, he notes, saying, "I believe the smaller tenants will be the primary ones that provide you with the immediate relief from inflation."

Godlin says he is "comfortable with the idea that returns, growth and cash flow approach something like the inflation rate if one has a broadly diversified portfolio of properties and if one is looking at a 10- or 15-year time frame.

"The return may not match inflation rates for the next couple of years but. . .over a much longer time frame, it can provide a kind of growth that we presently are not getting."

Real property has the capacity to grow where bonds don't, leading GE Investments' Wilson to comment, "Many times the question of real estate as an inflation hedge is confused with whether or not the real estate that you buy has the ability to appreciate in value. You have to focus very much on the supply-demand equation in a particular market—the local and regional economics, what's happening in retail, in the labor force. All of those things play a heavy role in whether or not a property can appreciate.

"Then, as an investor, you have to translate those factors into price, and once you acquire that asset, convert price into the ability to manage it in that environment."

Homart's Welcome comments, "We have seen no reduction in the level of appreciation in quality products."

Retail Beats Office

Given that real estate can be a safe, competitive investment, where, the panel was challenged, should real estate dollars flow? The stamp of approval went to retail—especially when compared to office properties. Salomon Brothers' White says, "If you call up an institutional investor today and you say the words 'suburban office building,' you might just hear a click on the other end of the telephone."

For its part, Homart continues to invest heavily in retail as opposed to the office side of the business and is doing well, says Welcome. "We have opened five centers this year. . .and have achieved probably our greatest leasing percentage of occupancy on opening in the history of the company. Rents were higher than they have ever been.

"Sales so far for open centers have been higher per capita per square foot than with any center. If I were to go back to 1988, 1987 and draw a trend line—or even as far as 1980—there would be no falling off for 1990. I can't point to any evidence that would suggest a decline for us from the trends of the past." Welcome qualifies this, however, by pointing out that this does not apply to smaller centers.

Large centers are doing well, according to several panel members. Donald A. King, managing partner of The RREEF Funds, Chicago, states, "I have read so much recently about the demise of the regional shopping center. . .but if we look at the ones we own and those of our competitors, we are in terrific shape. All those articles

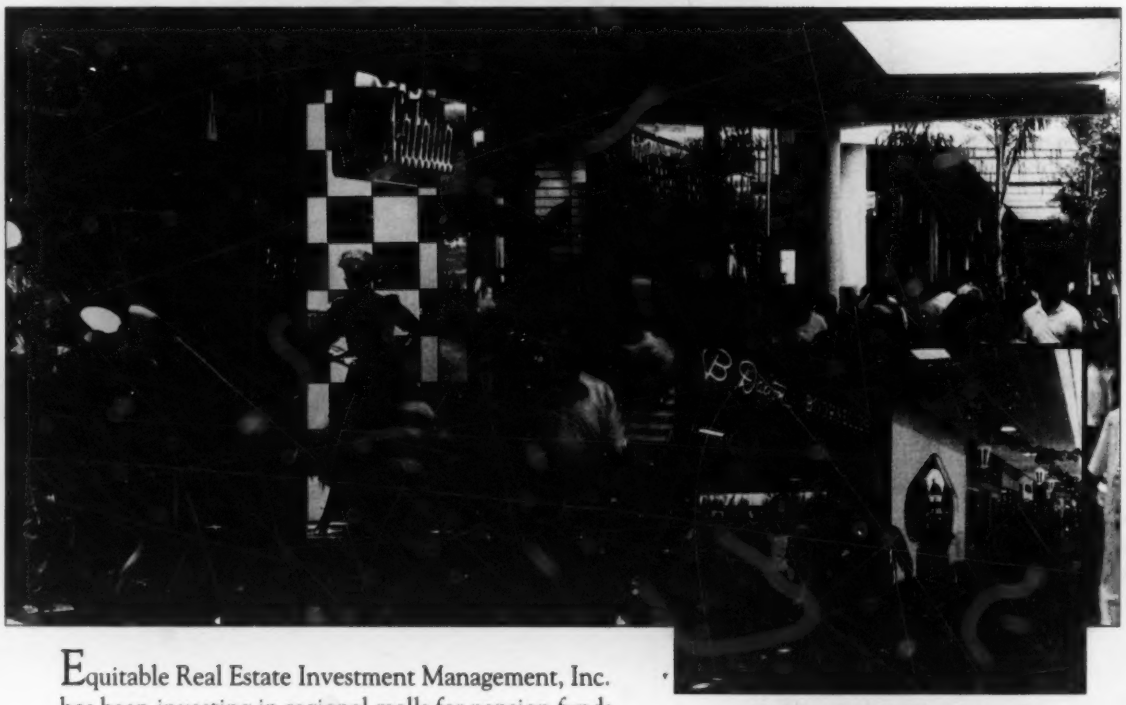
TOP 50 FUNDS WITH ASSETS IN REAL ESTATE EQUITY

Rank	Defined benefit fund	$ (millions)
1	AT&T	$3,897
2	California Employees	3,300
3	Ohio State Teachers	2,034
4	General Electric	1,977
5	Washington State Board	1,229
6	California State Teachers	1,188
7	State of Michigan	1,119
8	Connecticut Trust Funds	1,116
9	Ameritech	1,000
10	NYNEX	964
11	United Nations Joint Staff	956
12	Virginia Supplemental	921
13	Illinois Teachers	886
14	New York State & Local	809
15	Ford Motor	800
16	Pennsylvania Employees	753
17	Florida State Board	751
18	Southwestern Bell	749
19	Eastman Kodak	730
20	Pennsylvania Schools	672
21	Ohio Public Employees	646
22	US WEST	620
23	Westinghouse Electric	533
24	United Technologies	525
25	Minnesota State Board	511
26	Prudential Insurance	484
27	Oregon Public Employees	470
28	Wisconsin State Board	469
29	Colorado Employees	457
30	Illinois State Universities	449
31	Iowa Public Employees	442
32	Shell Oil	430
33	Illinois Municipal	398
34	New York State Teachers	366
35	Exxon	357
6	Allied-Signal	355
37	Chevron	326
38	Ohio School Employees	302
39	Pacific Gas & Electric	292
40	Kansas Public Employees	291
41	Illinois State Board	290
42	Nat'l Electrical Contractors	279
43	Hawaii State Employees	278
44	Monsanto	275
45	Los Angeles County	266
46	Utah State Retirement	252
47	Caterpillar	249
48	Alaska Retirement Systems	239
49	Maryland State Systems	238
50	Unisys	236
	Total	**$37,176**

Source: *Pensions & Investments*

Among the leading 200 pension funds, 125 defined benefit funds have assets in real estate equity. The top 50 have invested $37 billion. Only 13 defined contribution funds take equity positions in real estate, totaling $3.7 billion.

For our clients, we shopped early and got real bargains.



Equitable Real Estate Investment Management, Inc. has been investing in regional malls for pension funds since the mid-70's, building its unparalleled portfolio through a series of opportune landmark acquisitions, most made well before prices of regional malls skyrocketed. We lead the industry in regional mall investments for pension funds.

Now our newly formed COMPASS/Retail division is expanding our presence into direct management and leasing of a select number of our centers, rounding out our total involvement in retail. In other key centers we continue to rely on top managers like General Growth/Center Cos. and DeBartolo.

We are currently pouring more than a half a billion dollars into redeveloping and enhancing key centers around the country.

The best malls in the country are getting better, and our clients will reap the benefits.

Dadeland Mall, Miami:
A dominant regional mall in a strong market, part of Prime Property Fund, Equitable Real Estate's $3.8 billion open-end pension fund portfolio. Photos here show center before (inset) and after a $26 million Equitable Real Estate enhancement program.

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pointing out that regional malls are in trouble are totally off the mark. Pricing [of malls] depends where you are in the business cycle, and I think that prices have weakened since a year ago. I'm not sure we are going to find 10 times earnings or 10 percent cap rates, however. I think we will stick closer to five than to 10."

Community centers may be the beneficiary of the lower cap rates, says Ahern. "If you look at the historical performance of the better malls over the last 10 years, you are going to see some tremendous returns," he comments. "But I believe a lot of the return was caused by reduction in cap rates. As a result, if they now are buying at five times cash income and they say that in order for me to get that historical return, I will have to have larger sales gross of x percent—to me, it appears unrealistic.

"Absent a further reduction in cap rates, investors perceive they are not going to get the historical returns of the past 10 years. They back off investing [in malls] and focus on community shopping centers. I have seen more advisers starting to take a long look at community shopping centers." (For relative performance of super regional, regional, community and neighborhood shopping centers, see the chart on page A-4.)

Made for Each Other

Separate interviews with large and small companies confirm the viability of retail properties. Equitable Real Estate Investment Management of New York, which bills itself as the No. 1 investment adviser to pension funds and overseas investors and the leading U.S. institutional investor in regional and super regional shopping centers, has $11.6 billion in U.S. tax-exempt real estate assets, all in fully discretionary accounts.

Equitable's open-end Prime Property Fund counts almost $3.8 billion invested in quality, income-producing properties. Harry Pierandri, who heads Prime, says that retail properties have proved their mettle. With almost 37 percent of assets in retail properties, compared to the Russell-NCREIF Index group's 20 percent, Prime realized a 5-year annualized return of 14 percent, compared to the group's 11.7 percent return on retail properties.

"There is a lot of negativism out there," Pierandri says, "but real estate can and does generate attractive returns along with ability to adapt to inflation." Moreover, he says, pension funds take a long-term outlook that matches real estate's strengths. "Pension funds and real estate are made for each other."

As alert to opportunities in shopping centers as pension funds are, they are also chary of future vacancies brought on by overbuilding. Townsend's Ahern says he doubts that many developers would be able to resist the temptation to build if financing were available. "I remember someone told me a definition of a developer is similar to a serial killer who sits in his motel in the wee hours of the morning in the bathroom, writing on the mirror in lipstick, 'Please don't give me money.'"

Such gallows humor may be out of place, for the next few years at the le[illegible] as developers curtail new construction. It's already happening. The 1990 *Monitor*/NRB Census of U.S. Shopping Centers shows that by the end of this year, an estimated 1,967 new U.S. centers will have come on stream, a decline of 7.2 percent compared to last year's 2,120 additions.

Furthermore, the ICSC survey of 450 developers of all sizes finds new starts for the first six months of 1990 down 24 percent from the same period of 1989. (Because these are starts, not finishes, the decline will not show in the census figures for a year or two, when these newcomers are completed.)

Slower construction is certain to affect oversupply of space. A recent examination of vacancy rates in 107 metropolitan markets (see p. 51), shows wide variations. Downtown vacancies ranged from as high as 60 percent to a mere 2 percent; in strip centers, from 28 percent to 2 percent; and in enclosed centers, from 18.5 percent to 0 percent. On average, enclosed centers had the lowest vacancy rate, 6.5 percent, followed by strip centers with 12.3 percent and downtown with 15.9 percent.

Would-be investors are advised to look beyond the averages, however. Lee T. Henley, president of Phoenix-based Vestar Development Co. (which ranked 26th in 1990 in *Monitor's* Top 50** in Development), says, "It's meaningless to look at macro figures when trying to evaluate shopping centers. The key is individual assets: quality of tenants, number of credit tenants, the area itself and the facility itself. Certainly there were many

50 ADVISERS WITH ASSETS IN RETAIL

Firm	% of assets in retail
Duoco	100%
First Asset Realty Advisors	91
Corporate Property Investors	86
Schroder Real Estate Associates	82
JMB Institutional Realty	82
Hart Advisors	49
Morrison, Karsten, Ramzy & Arthur	45
Wells Fargo Realty	44
Meyer Real Estate Advisors	43
Rocky Mountain Investors	41
Dreyfus Realty Advisors	40
Lehndorff & Babson	40
L.J. Melody	40
The O'Connor Group	40
Aldrich, Eastman & Waltch	37
Harris Trust & Savings Bank	37
CIGNA Investments	35
Heitman Advisory	35
MONY—New York	35
J.P. Morgan Investment	35
RREEF Funds	35
First Wisconsin Trust	34
Mellon/McMahan Real Estate	31
Bircher Realty Advisors	30
The Yarmouth Group	28

**Each year *Monitor* publishes lists of the Top 50 companies in retail management, development and acquisition.

Firm	% of assets in retail
AMB Institutional Realty	27
First National Bank of Boston	27
FS Realty Partners	27
PMRealty Advisors	26
Coldwell Banker Commercial Realty	25
Equitable Real Estate	25
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properties built in the wrong place leading to those humongous vacancy rates. You can't look at averages. You must look at specifics."

Stress on Remodeling

GE Investments' Wilson states that there is not a lot of development activity and what there is has unique characteristics. "Most of the deals that we are seeing tend to focus on acquiring assets that need to be repositioned, either through some capital infusion for lease-up, or rehabs—existing assets that need something happening to them," he says.

This is confirmed by *Monitor's* latest Top 50 survey, results of which will appear in January 1991. Preliminary findings reveal whether executives of some 240 companies in management, development, acquisition and ownership of shopping centers thought their firms would spend proportionately more, less or about the same on development in 1991.

Last year, in contrast to the previous two surveys, these leaders had trimmed their spending plans; and this year they are even more cautious. Forty-two percent of respondents say they intend to spend more on renovations in the year ahead. This declined from 50 percent the previous year.

In new construction, only 37 percent say they plan to spend more in the coming year, compared to 53 percent in the previous survey. Planned expansions dropped to 36 percent from 47 percent last year. Acquisitions fell to 35 percent from 43 percent.

Many leading shopping center developers view these cutbacks as a necessary and inevitable correction. "Speculative building is over," says Equity Properties' London. "Much of the consolidation and restructuring that we are now undergoing is inevitable, in terms of our natural progression to a more European perspective on real estate. As we correct to building for pent-up rather than future demand, there is going to be a fair amount of pain in the scratch development sector. While lenders are going to take some developer-directed grief, not all of it will be fair or warranted."

With some 20 million square feet under management at the end of 1989 (placing 17th in *Monitor's* Top 50 in Management and sixth in Acquisition), Equity Properties has pursued a policy of buying existing properties and redoing them, typically being the second or third owner.

"In the '70s and '80s many developers were building for lenders' consumption—build and sell in a year or two for a quick flip. Now we're saying it's a five- to 15-year, longer-term investment. S&Ls have gone from construction loans to permanent loan providers." London says.

Innovative Approaches

Recent declines in new construction notwithstanding, the shopping center industry will enter 1991 with record-setting numbers. The total number of centers stands at 36,650 centers, up 3.6 percent. Gross leasable area (GLA) totals 4.5 billion square feet. Sales now exceed $725 billion dollars—more than half of the nation's non-automotive sales. The only negative is that square footage grew more than sales. As the result, average sales per square foot of GLA per year declined 0.7 percent to $160.90 from $162.02 the year before.

Coping with these new dimensions will call for new approaches. Vestar's Handley says that the recent leveraged buyout of his company included one of the few direct investments by a pension fund in an operating shopping center developer, as opposed to project or adviser investment.

"The $150 million deal had benefits for all," he says. "It provided funds for a management buyout of the original company, Estes Development. The pension fund bought 50 percent ownership in a portfolio of 100,100- to 300,000-square-foot shopping centers with skilled management at a substantial discount. And Estes was able to sell an entire division in one transaction while raising needed capital for themselves.

"Such deals don't come with the ease of the go-go days of the '80s," cautions Handley. "The level of due diligence in this case was that of a trustee—higher than that of a fiduciary or typical lender. Be prepared for a six-month due diligence effort during contract negotiations. And there will be nothing you can hide because their analysis will expose all the negatives.

"It's much like going to a bank, but more so. In addition to an overall business plan—goals, etc.—each

individual property should have a leasing plan, 10-year projection of cash flow, competitive analysis and demographic statistics. Their diligence will go beyond this: appraisals, hazardous waste analysis, feasibility analysis, broader market studies."

The payoff for developer and fund, he says, is that real estate offers return rates of 15 percent to 25 percent vs. 7 percent to 10 percent on typical bonds.

Short Term: Shortsighted

Will pension funds look at making tactical investments in real estate in contrast to longer-term strategic investments? RREEF Funds' King thinks it unwise. "Some of the places that have been talked about for making tactical moves are a feed-off of the problems with the RTC and banks and thrifts—where you can apparently get control of assets for nickels and dimes on the dollar. . . . .We've looked at the tactic of going in a short-term turnaround situation and make some serious money three to five years and then just back out it. That's not something that we as longer-term investors in the real estate business would advise our clients to do."

GE Investments' Wilson adds, "I think there is a basic contradiction with the concept of doing something quickly because of an event in real estate. Investing money in an asset class that is less liquid and longer term, based upon a short-term event, is not the way to go."

Welcome says he is worried about the short term nonetheless. "One could certainly make an argument that in the next 12 months, if we are heading into a recession, it would be greatly exacerbated by what's going on in the Middle East. If that's the case, no matter what area of real estate you look at, it's not going to do anything to add to the value today of those properties. I would certainly argue for waiting rather than acting today—although I agree that in the long term, it's awfully hard to look at real estate as something that you judge by momentary events," he says.

Ahern adds that he feels comfortable with a cautious approach. "The brakes that are being applied make one comfortable that you are not acting imprudently to attain an allocation goal at the cost of returns.

"If you read between the lines today, selectivity is another word to say, 'Slow the investment process,' and that what's occurring.

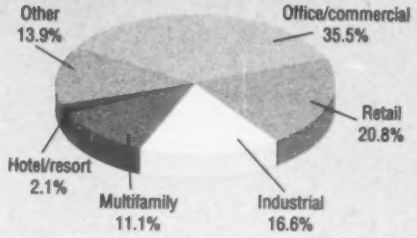
"There are some excellent opportunities in the real estate market today," Ahern continues. "In the last couple of years, our clients have made some investments that have performed exceptionally well relative to what would be a standard index. . . .If you have good investments, to slam on the brakes would be foolish."

Roger H. Ogden, chairman and CEO of The Maurin-Ogden Cos. of New Orleans, that owns some 4 million square feet in about 40 properties, says developers are more concerned with financing and adds that the credit crunch is not a long-term thing. "It will take a year, a year and a half, maybe even two years to overcome credit problems and overbuilding," he says. "Policy matters are in place. The medicine is being taken. Starts have declined. We've got the worst conditions since 1973, a hangover from the binge of too much money chasing too few properties. We're going back to a market-driven economy. That's *good*.

"I'm quick to add that there is real estate product developed in the go-go days of the S&L binge that is totally unusable. Office buildings in pastures. Strip centers in as yet undeveloped areas or unanchored. Some of these are so far gone, they are effectively valueless."

With unabashed enthusiasm, he concludes, "It is absolutely the ideal time for the smart money—and that includes pension plans—to make safe and timely investments."

WHERE TAX-EXEMPT DOLLARS ARE INVESTED



Source: *Pensions & Investments*

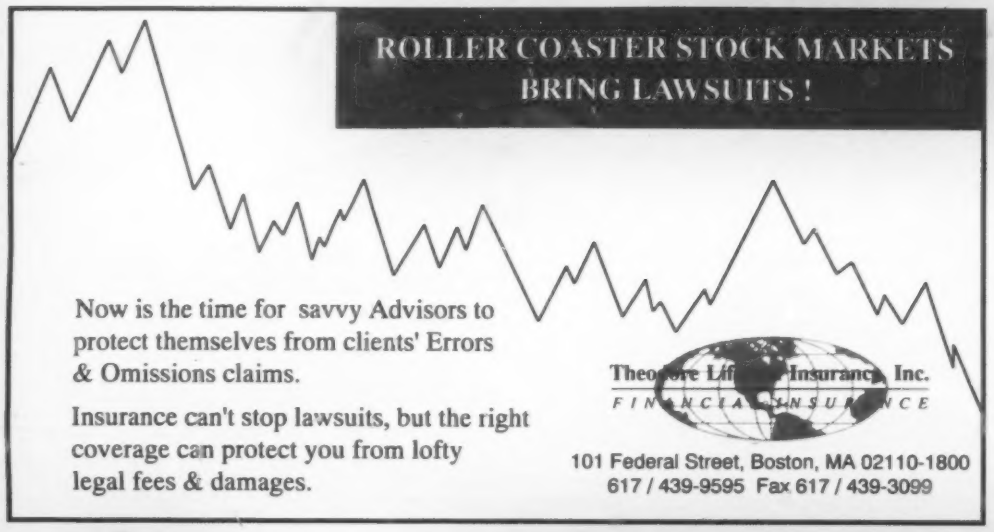
Flexibility Counts

Richard D. "Skip" Bronson, partner of the Hartford, CT-based Bronson & Hutensky, says the problems in the shopping center are largely due to perception. "In effect, everybody knows that real estate is down, and even savvy investors paint shopping centers with the same brush. Even in the Northeast, you don't see boarded up centers and closed malls. Shopping centers are unique; they do have a special niche. Supermarkets are the most common anchor in open centers, and they are doing as well as ever."

Bronson says the company (ranked 11th in *Monitor's* Top 50 in Development last year) is currently dealing with one of the nation's largest insurance companies. "Obviously, they're cautious. You can't get unsecured credit. And where everyone went for quantity in the '80s, they're going for quality in the '90s. There is indeed a flight to quality.

"What matters today in our industry is developers who understand retail. In an office building, it doesn't matter who's down the hall from you. In a shopping center, it sure does matter. There's a synergy unlike any other form of real estate. The failures are and will continue to be among developers who have no knowledge of retail.

"We all have to be more flexible," he says. "We've got no choice. The good old days were 30 days ago." ■



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A

ACG Asset Consulting Group Inc.
231 S. Bemiston, Suite 1210, St. Louis, Mo. 63105; (314) 862-4848

ACG Asset Consulting Group Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and manager selection, performance measurement and additional analysis for U.S., foreign, futures/options and GIC investments.

The firm also offers efficiency reviews, fee negotiations, trading cost reviews and cash flow structural planning.

The firm provides investment performance analysis to the investment management industry.

The firm has special expertise in insurance company assets.

Significant changes or developments at the firm in the past year include the establishment of the firm as an independent corporation.

Of 55 tax-exempt clients on retainer, 15 are corporate, 11 are public, 11 are union and 18 are foundation/endowment. The firm also provided services to three tax-exempt non-retainer clients during the past year, of which two were union and one was foundation/endowment.

There are six professional consultants. Fees are payable in hard and soft dollars.

Clients include The Episcopal Church, Central Illinois Laborers', Blue Cross/Blue Shield of Missouri and Kansas City Public Schools.

Charles R. Holmes Jr. is client contact.

Alpha Consulting Group
210 E. Michigan St., Milwaukee, Wis. 53202; (414) 276-8320

Alpha Consulting Group Inc. provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign futures/options and GIC manager selection; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC performance measurement and analysis.

The firm has special expertise in manager search and performance.

There are two professional consultants. Fees are payable in hard dollars.

Robert J. Bukowski is the client contact.

Ammonite Resources
181 Mariomi Road, New Canaan, Conn. 06840; (203) 972-1130

Ammonite Resources provides technical evaluations and due diligence of direct oil and gas investments. Management consulting services in monitoring, structuring and exiting oil and gas investments also are offered.

The firm has special expertise in petroleum geology and engineering and the economics of oil and gas.

Significant changes or developments at the firm in the past year include the opening of offices in Oklahoma City and Austin, Texas.

There is one corporate tax-exempt client on retainer. The firm also provided services to three non-retainer clients during the past year, of which two were corporate and one was public.

There are 16 professional consultants. Fees are payable in hard dollars.

G.W. Hobbs IV is the client contact.

B

Ballard Biehl & Kaiser
2755 Campus Drive, San Mateo, Calif. 94403; (415) 571-5800

Ballard Biehl & Kaiser provides development of appropriate global asset allocation, including real estate.

The firm provides global asset allocation strategies to the investment management industry.

The firm has special expertise in global multiple asset allocation.

Significant changes or developments at the firm in the past year include the development of asset allocation software in cooperation with Wyatt Software.

Of the 10 tax-exempt clients on retainer, six are corporate, three are public and one is foundation/endowment.

There are five professional consultants. Fees are payable in hard and soft dollars.

The firm offers three investment vehicles: the BB&K International Fund; BB&K International Fixed Income Fund; and the Diversafund.

Clients include Bechtel, California Public Employees, Ameritech and the City of Los Angeles.

Brian E. Schaefer is client contact.

BARRA
1995 University Ave., Berkeley, Calif. 94704; (415) 548-5442

BARRA provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, private placements, futures/options and GIC manager performance measurement and analysis.

The firm also offers portfolio risk analysis and optimization (for the U.S., the U.K., Canada, Australia, Japan, Sweden, France the world and emerging markets); asset allocation tools; currency risk modeling; multiple manager analysis; normal portfolio construction and library; customized valuation and risk models; seminars; and newsletters.

The firm provides the following to the investment management industry: U.S. and international equity and fixed-income analyses; risk models of the major capital markets; and value-added consulting.

The firm has special expertise in quantitative investment consulting.

Significant changes or developments at the firm in the past year include the establishment of offices in Hong Kong and Frankfurt.

Of the 215 clients on retainer, 200 are corporate and 15 foundation/endowment.

There are 97 professional consultants. Fees are payable in hard and soft dollars.

Todd Doersch is the client contact.

Beacon Hill Financial Corp.
19 Elm St., Cohasset, Mass. 02025; (617) 383-2300

Beacon Hill Financial Corp. provides development of investment policies and objectives; and manager selection for real estate, venture capital, LBO and private placement investments.

The firm also offers distribution and marketing of

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Marketing and distribution of private placements are offered to the investment management industry.

The firm has special expertise in marketing analysis.

The firm provided services to 22 tax-exempt non-retainer clients during the past year, of which 11 were corporate, six were public and five were foundation/endowment.

There are three professional consultants. Fees are payable in hard dollars.

The firm also offers investment banking and corporate finance advisory services.

Robert F. Johnston is client contact.

Bear Stearns Fiduciary Services Inc.

805 15th St. N.W., Suite 1120, Washington, D.C. 20005; (202) 898-2270

Bear Stearns Fiduciary Services Inc., a subsidiary of The Bear Stearns Cos. Inc., provides development of investment policies and objectives, and appropriate asset allocation. Manager selection and performance measurement are offered for U.S., foreign, real estate and GIC investments. Additional analysis is offered for U.S. and GIC investments.

The firm also offers assistance in obtaining fiduciary liability insurance and performs reviews of a fund's investment program.

The firm has special expertise in controlling investment risk and expense, in protecting sponsors from fiduciary exposure, and in evaluating and monitoring brokerage practices.

Of the 11 tax-exempt clients on retainer, two are corporate and nine are union. The firm also provided services to five tax-exempt non-retainer clients during the past year, of which one was corporate, two were union and two were foundation/endowment.

There are four professional consultants. Fees are payable in hard dollars.

Clients include Central States Teamsters; Masters, Masters, Mates & Pilots; Teamsters Local 293; and Plumbers Local 154.

Frank Lilly, Samuel Halpern and Alan Puldin are client contacts.

Becker, Burke Associates

221 N. LaSalle St., Chicago, Ill. 60601; (312) 782-5665

Becker, Burke Associates Inc. provides development of investment policies and objectives, and development of appropriate asset allocation. It provides manager selection services for U.S., global and real estate investments. Performance measurement and additional analysis is provided for U.S., global, real estate, private placements, futures/options and GIC investments. Performance measurement also is offered for venture capital and LBO investments.

Customized Performance Standards also are provided.

The firm provides performance measurement to the investment management industry.

The firm has special expertise in investment policy, manager structure, manager search, performance-based fees, performance attribution, foreign manager searches and Blue Cross reserves.

Significant changes or developments at the firm in the past year include enhanced performance attribution and the addition of nine clients.

Of the 16 tax-exempt clients on retainer, five are corporate, nine are public, one is union and one is foundation/endowment. Seven non-retainer tax-exempt clients — four corporate and three public — were assisted by the firm.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include the Chicago Municipal Workers, Kentucky Teachers, Naloo Chemical and Perkin Elmer.

Edmund Burke, Howard Pohl and Ron Surz are the client contacts.

Benetech Canada Inc.

2 Adelaide St. W., Suite 400, Toronto, Ontario M5H 1L6; (416) 369-9580

Benetech Canada Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and global/international and GIC manager selection and performance measurement.

The firm provides investment manager performance measures, policies, objectives, asset allocation and actuarial services to the investment management community.

The firm has special expertise in investment manager selection and reviews for Canadian-based pension plans.

There are two corporate tax-exempt clients on retainer. The firm also provided services to 10 non-retainer clients during the past year, of which nine were corporate and one was foundation/endowment.

There are 12 professional consultants. Fees are payable in hard dollars.

Fraser J.R. MacDonald is the client contact.

Berla Investment Consulting

43 Quail Court, Suite 108, Walnut Creek, Calif. 94596; (415) 947-0326

Berla Investment Consulting provides development of investment policies and objectives, and appropriate asset allocation. It also provides manager selection, performance measurement and additional analysis for U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC investments.

The firm has special expertise in investment performance measurement and analysis.

Of the 20 tax-exempt clients on retainer, eight are corporate, three are public, six are union and three are foundation/endowment. It has one union tax-exempt, non-retainer client.

There is one professional consultant. Fees are payable in hard dollars.

Clients include Electric Power Research Institute, IBEW Local 332, Merritt Peralta Medical Center and Mount Diablo Medical Center.

George A. Berla is client contact.

Bidart & Ross Inc.

6490 S. McCarran Blvd., Suite 15, Reno, Nev. 89509; (702) 826-6400

Bidart & Ross Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, futures/options and GIC manager selection, performance measurement and analysis.

The firm has special expertise in asset allocation studies, employee communications, presentations, cost containment services, and assisting in administrative, actuarial and custodial searches and evaluations.

There are 21 corporate tax-exempt clients on retainer.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Evans & Sutherland, Blue Cross/Blue Shield, Idaho Power and the Washington Cos.

James Ross is client contact.

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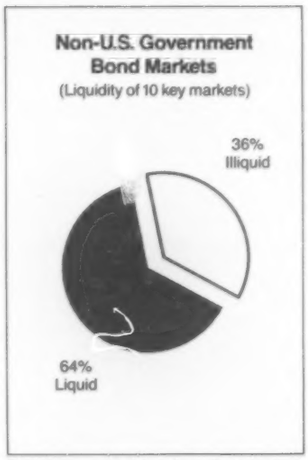

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Alan D. Biller & Associates
333 Town & Country Village, Palo Alto, Calif. 94301; (415) 328-7283

Alan D. Biller & Associates Inc. provides development of investment policies and objectives, and of appropriate asset allocation. Manager selection, performance measurement and additional analysis is provided for U.S., foreign, real estate, private placements, futures/options and GIC investments.

The firm also acts as a fiduciary investment adviser, dealing with all aspects of plan policy, implementation and reporting.

The firm has special expertise in working with Taft-Hartley plans.

Of the five tax-exempt clients on retainer, one is corporate and four are union. The firm also provided services to two corporate tax-exempt non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard dollars.

Clients include Western Conference of Teamsters, ILWU-PMA Pension Plan, IUOE Locals 302 and 612, and Todd Pacific.

Alan D. Biller is client contact.

Employee benefit trends will be highlighted in the Dec. 10 issue.

Brock/Daniels Group
Suite 900, The Financial Center, Birmingham, Ala. 35203; (205) 250-5615

Brock/Daniels Group, a subsidiary of the Robinson-Humphrey Co., provides development of investment policies and objectives, and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S. and global/international investments; additional analysis is offered for U.S. investments.

The firm has special expertise in serving plans with assets between $1 million and $30 million.

Of the 228 tax-exempt clients on retainer, 225 are corporate and three are foundation/endowment.

There are three professional consultants. Fees are payable in hard and soft dollars.

Brokerage services also are offered.

John G. Brock is client contact.

Brouwer & Janachowski Inc.
230 California St., Suite 420, San Francisco, Calif. 94111; (415) 362-4160

Brouwer & Janachowski Inc. provides development of investment policies and objectives, and of appropriate asset allocation. Manager selection, performance measurement and additional analysis is offered for U.S. and foreign investments.

The firm has special expertise in the no-load mutual fund industry.

The firm provided services to 18 tax-exempt non-retainer clients during the past year, of which 14 were corporate, one was public and three were foundation/endowment.

There are three professional consultants. Fees are payable in hard dollars.

Clients include San Francisco Chronicle Publishing, Stanford Business School Alumni Association and the Port of Oakland.

Randolph D. Eyler is client contact.

Buck Pension Fund Services
2 Pennsylvania Plaza, New York, N.Y. 10121; (212) 330-1248

Buck Pension Fund Services Inc., a subsidiary of Buck Consultants, provides development of investment policies and objectives, and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC investments. Additional analysis is offered for U.S., foreign, real estate and GIC investments.

The firm offers development of normal portfolios for equity and fixed-income for the investment management industry.

The firm has special expertise in asset/liability modeling, manager searches, performance attribution and GIC and annuity placement.

Significant changes or developments at the firm in the past year include the opening of regional offices in Chicago, Dallas and Pittsburgh.

Of the 18 tax-exempt clients on retainer, 12 are corporate, four are public, one is union and one is foundation/endowment. The firm also provided services to 33 tax-exempt non-retainer clients during the past year, of which 26 were corporate, three were public, two were union and two were foundation/endowment.

There are 13 professional consultants. Fees are payable in hard and soft dollars.

William H. Overgard is the client contact.

C

Callan Associates Inc.
71 Stevenson St., Suite 1300, San Francisco, Calif. 94105; (415) 974-5060

Callan Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection, performance measurement and analysis.

The firm provides style performance reports, investment measurement service, presentation consulting, marketing program analysis and product analysis to the investment management community.

The firm has special expertise in strategic planning to include asset allocation, liability simulation, asset mix optimization and a full range of consulting services relating to pension fund management.

Significant changes or developments at the firm in the past year include the establishment of a consulting office in Denver and the addition of international performance measurement analysis.

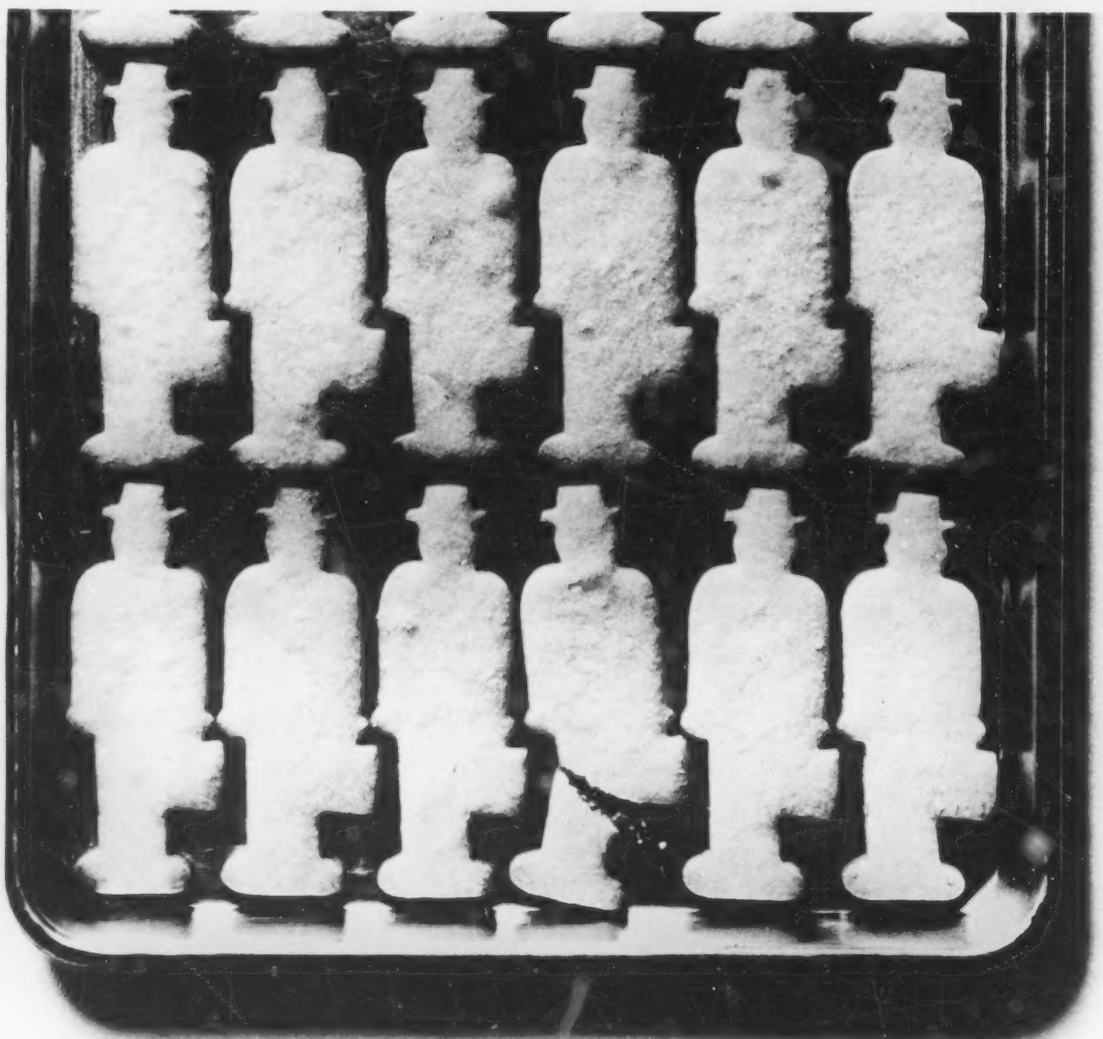
Of the 221 clients on retainer, 73 are corporate, 52 are public, 32 are union, 19 are foundation/endowment and 45 are in miscellaneous categories. The firm also provided services to 41 non-retainer clients during the past year, of which 23 were corporate, 10 were public, three were union, three were foundation/endowment and two were in miscellaneous categories.

There are 31 professional consultants. Fees are payable in hard and soft dollars.

Ronald D. Peyton is the client contact.

Cambridge Associates Inc.
1 Financial Center, Boston, Mass. 02111; (617) 439-3232

Cambridge Associates Inc. provides development of investment policies and objectives; development



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of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options manager selection, performance measurement and analysis. Manager selection and performance measurement are offered for GIC investments.

The firm also offers investment and financial planning research reports.

The firm has special expertise in financial and investment planning for colleges and universities, foundations, museums, hospitals, international organizations, and other non-profit institutions. Extensive coverage is offered for real estate, venture capital, global investing and other non-traditional assets.

Significant changes or developments at the firm in the past year include the opening of a San Francisco office.

The firm has 300 clients on retainer.

There are 25 professional consultants. Fees are payable in hard and soft dollars.

Clients include Harvard University, Metropolitan Museum, John D. and Catherine T. MacArthur Foundation and Stanford University.

Sandra Urie Thorpe is client contact in Boston.

The Capital Control Group

750 Lake Cook Road, Buffalo Grove, Ill. 60089; (708) 459-4770

The Capital Control Group Ltd. provides development of investment policies and objectives; development of appropriate asset allocation; and manager selection and performance measurement for U.S. and real estate investments.

The firm has special expertise in consulting to Taft-Hartley plans.

Significant changes or developments at the firm in the past year include the addition of new reports for clients, including a commission analysis.

Of the 35 tax-exempt clients on retainer, 30 are corporate and five are union. The firm provided services to 50 non-retainer tax-exempt clients, of which 25 were corporate and 25, union.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Plumbers & Pipefitters Local 85, Sheet Metal Workers Local 70 and Pennywise Publications.

Jay Rosen is client contact.

Capital Trust Co.

4380 S.W. Macadam, Portland, Ore. 97201; (503) 228-2300

Capital Trust Co., a subsidiary of Harris & Harris Group, provides development of investment policies and objectives; development of appropriate asset allocation; U.S. and foreign manager selection, performance measurement and analysis; venture capital manager selection and performance measurement; and futures/options manager selection and analysis.

The firm has special expertise in quantitative analysis, construction of custom benchmarks and performance attribution.

Of the 15 tax-exempt clients on retainer, eight are corporate, two are union and five are foundation/endowment. The firm also provided services to six non-retainer clients during the past year, of which five were corporate and one was public.

There are three professional consultants. Fees are payable in hard dollars.

Clients include Pacificorp, Payless, Hyster and Stevedoring Services of America.

Nancy L. Jacob is the client contact.

The Carmack Group Inc.

1961 Huntington Drive, Suite 201, Alhambra, Calif. 91801-1240; (818) 289-0873

The Carmack Group Inc. provides development of investment policies and objectives; development of appropriate asset allocation; manager selection, performance measurement and additional analysis for U.S., real estate, futures/options and TAA investments; manager selection and additional analysis for venture capital investments; and manager selection and performance measurement for GIC investments.

The firm provides customized analytical graphics and development of relevant benchmarks to the investment management industry.

The firm has special expertise in analyses of performance characteristics; development of relevant benchmarks; and comprehensive analyses of TAA and convertibles securities portfolios.

Of the 12 tax-exempt clients on retainer, nine are corporate and three are foundation/endowment. The firm also provided services to six tax-exempt non-retainer clients during the past year, of which four were corporate and two were foundation/endowment.

There are 12 professional consultants. Fees are payable in hard and soft dollars.

Clients include Cal Tech, Loyola Marymount University and The Common Fund.

J.A. Carmack is client contact.

CDA Investment Technologies Inc.

1355 Piccard Drive, Rockville, Md. 20850; (301) 975-9600

CDA Investment Technologies Inc., a subsidiary of Thomson Corp., provides U.S. and foreign investment performance measurement and analysis.

The firm provides the following to the investment management industry: performance measurement, portfolio analysis, comparative performance statistics and asset allocation.

The firm has special expertise in custom performance measurement and analysis applications.

The firm provided services to 270 non-retainer tax-exempt clients during the past year, of which 238 were corporate, 14 were public, 10 were union and eight were foundation/endowment.

There are 12 professional consultants. Fees are payable in hard and soft dollars.

Lisa M. Warren is the client contact.

C.E.D.A.R. Investment Services Ltd.

902, Kapilano 100, Park Royal, West Vancouver, British Columbia V7T 1A2; (604) 926-7358

C.E.D.A.R. Investment Services Ltd. provides screening and consultation for socially responsive Canadian investments.

The firm provides social audit analysis to the investment management industry.

The firm has special expertise in Canadian ethical/socially responsive investing.

There is one professional consultant. Fees are payable in hard dollars.

Tracey Gagan is the client contact.

Collins Associates

840 Newport Center Drive, Newport Beach, Calif. 92627; (714) 644-5751

Collins Associates provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, futures/options and GIC manager selection, performance measurement and analysis.

The firm has special expertise in discovery, evaluation, selection and monitoring of independent investment managers, including hedge funds and niche managers.

Significant changes or developments at the firm in the past year include the development of four investment vehicles.

Of the 20 tax-exempt clients on retainer, 16 are corporate and four are foundation/endowment.

There are nine professional consultants. Fees are payable in hard dollars.

Clients include FMC, Sunkist Growers, Xerox and the University of Texas.

Donald W. Leahy is the client contact.

Colonial Consulting Corp.

610 Fifth Ave., Suite 420, New York, N.Y. 10020; (212) 307-1830

Colonial Consulting Corp. Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection and performance measurement and analysis.

The firm also offers selection and monitoring of custodians, forecasting and client education meetings.

Systems consulting is provided to the investment management industry.

The firm has special expertise in serving foundations and endowments, and in investment technology.

Of the 13 tax-exempt clients on retainer, two are corporate and 11 are foundation/endowment.

There are nine professional consultants. Fees are payable in hard and soft dollars.

Clients include Dominion Resources, Charles A. Dana Foundation, Carnegie Endowment for International Peace and National Council of the YMCA.

Jeffrey A. Teper is client contact.

Consulting Group

222 Delaware Ave., Ninth Floor, Wilmington, Del. 19801

Consulting Group, a division of Shearson Lehman Brothers Inc., provides development of investment policies and objectives; development of appropriate asset allocation; and U.S. and foreign manager selection, performance measurement and analysis.

The firm has special expertise in qualitative and quantitative proprietary investment manager analysis.

Significant changes or developments at the firm in the past year include enhancement of technical reporting capabilities and additional staff analysts.

Of the 197 clients on retainer, 44 are corporate, 52 are public, 50 are union and 51 are foundation/endowment.

There are 131 professional consultants. Fees are payable in hard and soft dollars.

Clients include Kansas Power & Light/Gas Service, City of Cincinnati, University of Arizona Foundation and the Brotherhood of Maintenance of Way Employes.

David J. Shanahan is the client contact at (312) 648-3052.

Consulting Services Group

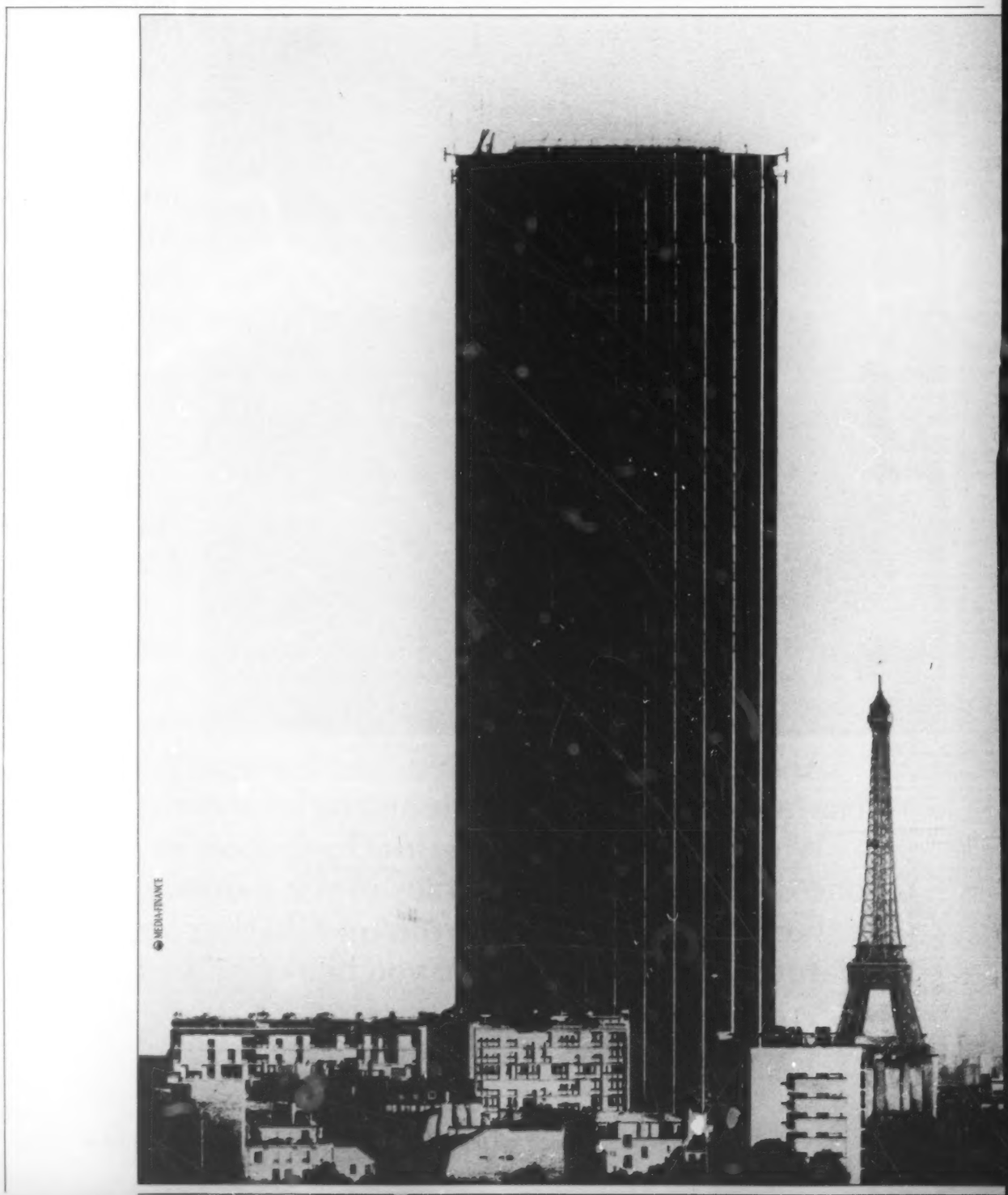
80 Monroe Ave., Suite 800, Memphis, Tenn. 38103; (901) 525-8080

Consulting Services Group L.P. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, private placement, futures/options and GIC manager selection, performance measurement and analysis.

The firm also offers asset allocation analysis and peer group comparison reporting.

The firm provides asset allocation analysis and performance comparison reports to the investment management industry.

The firm has special expertise in investment goal and guideline preparation, asset allocation, historical reviews, manager searches and selection, and



on-going performance evaluation.

Significant changes or developments at the firm in the past year include the acquisition of the firm from Furman Seitz Mager Dietz & Birney. The staff was increased to 26.

Of the 30 tax-exempt clients on retainer, 18 are corporate, three are public, one is union and eight are foundation/endowment. The firm also provided services to one corporate tax-exempt non-retainer client during the past year.

There are 11 professional consultants. Fees are payable in hard and soft dollars.

Clients include Memphis Light, Gas & Water, Hospital Corp. of America, Arch Mineral and LeBonheur Children's Medical Center.

Lee Giovannetti is client contact.

D

Dahab Associates Inc.
52 Nassau Ave., Islip, N.Y. 11751; (516) 277-8301

Dahab Associates Inc. provides development of investment policies and objectives; and appropriate asset allocation; and U.S., foreign, real estate, venture capital, private placements, futures/options and GIC manager selection, performance measurement and analysis.

The firm has special expertise in custom reporting and unusual policy restrictions.

Significant changes or developments at the firm in the past year include the opening of an Orlando, Fla., office.

Of the 33 tax-exempt clients on retainer, nine are corporate, six are public, nine are union, five are foundation/endowment and four are other types of clients.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Pennsylvania Municipal Retirement System, the City of Newport News, Sonat and New Jersey IBEW Local 592.

Richard Dahab, David Parker and Janine Foreman are the client contacts.

Davies Investment Associates Inc.
215 Piedmont Ave. N.E., Suite 1009, Atlanta, Ga. 30308; (404) 525-7541

Davies Investment Associates Inc. provides development of investment policies and objectives, and appropriate asset allocation; and U.S., foreign, real estate and GIC manager selection. Performance measurement is offered for U.S., foreign and real estate managers; additional analysis is available for U.S. managers.

Of the eight tax-exempt clients on retainer, four are corporate and four are public. The firm has 12 non-retainer tax-exempt clients, of which six are corporation and six are public funds.

There is one professional consultant. Fees are payable in hard and soft dollars.

James J. Davies is client contact.

Dean Witter Reynolds' Investment Consulting Services
2 World Trade Center, 74th Floor, New York, N.Y. 10048; (212) 392-7075

Dean Witter Reynolds' Investment Consulting Services, a unit of Dean Witter Reynolds Inc., a member of the Sears Financial Network, provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign and options/futures manager selection, performance measurement and analysis.

The firm also offers custodial and trading services.

The firm has special expertise in money manager search and referral.

Significant changes or developments at the firm in the past year include the addition of a due diligence specialist to research global/international managers.

Of the 396 tax-exempt clients on retainer, 308 are corporate, 31 are public, 21 are union and 36 are foundation/endowment.

There are 16 professional consultants. Fees are payable in hard and soft dollars.

Clients include the City of New Orleans, McConnell Foundation, Michigan Laborers and Chicago Firemen.

Kevin M. Hunt is the client contact.

DeMarche Associates Inc.
1900 W. 47th Place, Suite 300, Westwood, Kan. 66205; (913) 384-4994

DeMarche Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection, performance measurement and analysis.

The firm provides the Style Code Rating System (SCORS), DeMarche Strategy Service, performance diagnostics and attribution services to the investment management industry.

The firm has special expertise in research, particularly in performance attribution.

Significant changes or developments at the firm in the past year include the establishment of a survey department and development of a manager optimization product.

Of the 140 tax-exempt clients on retainer, 70 are corporate, 26 are public, eight are union and 36 are foundation/endowment. The firm also provided services to 28 non-retainer tax-exempt clients during the past year, of which 14 were corporate, seven were public, one was union and six were foundation/endowment.

There are 16 professional consultants. Fees are payable in hard and soft dollars.

Clients include Baxter International, Emerson Electric, Inland Steel and Missouri Public School Retirement System.

Steve Farrell is the client contact.

Dorn & Helliesen Inc.
1995 University Ave., Suite 380, Berkeley, Calif. 94704; (415) 548-3400

Dorn & Helliesen Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital and GIC manager selection, performance measurement and analysis.

The firm also emphasizes evaluation and analysis as a fiduciary; traditional portfolio measurement is de-emphasized.

The firm has special expertise in policy and guidelines, manager search and evaluation, and optimization of manager allocation and structure.

Significant changes or developments at the firm in the past year include the addition of a principal.

Of the 12 tax-exempt clients on retainer, six are corporate, four are public, one is union and one is foundation/endowment. The firm also provided services to five tax-exempt non-retainer clients during the past year, of which four were corporate and one was public.

There are five professional consultants. Fees are payable in hard dollars.

Clients include the State of Idaho, Contra Costa County, Albertsons and the Retail Clerks of Washington.

Robert Helliesen is the client contact in the California office; Douglas Dorn is the client contact in the Boise, Idaho, office at (208) 344-9200.

E

Effron Enterprises Inc.
363 Westchester Ave., Port Chester, N.Y. 10573; (914) 939-0200

Effron Enterprises Inc. provides U.S. and foreign manager selection and performance measurement and analysis. Performance measurement and analysis also is offered for futures/options and GIC investments.

The firm also offers statistical analysis, hybrid and customized indexes and portfolio strategies.

The firm provides the following to the investment management industry: performance measurement analysis; portfolio accounting (domestic, international and global); customized projects; and manager data bases (domestic and global).

The firm has special expertise in performance measurement, portfolio accounting, international investment theory and customized investment projects.

The firm provided services to 130 tax-exempt non-retainer clients during the past year, of which 118 were corporate, six were public, one was union and five were foundation/endowment.

There are seven professional consultants. Fees are payable in hard and soft dollars.

Stephen J. Klein is client contact.

Ennis, Knupp & Associates
10 S. Riverside Plaza, Suite 700, Chicago, Ill. 60606; (312) 715-1700

Ennis, Knupp & Associates provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, private placement, futures/options and GIC manager selection, performance measurement and analysis. Performance measurement only is offered for LBO investments.

The firm also offers capital markets research and manager style analysis.

The firm has special expertise in foreign investments, currency hedging, real estate and venture capital.

The firm has 36 retainer clients. The firm also provided services to 13 tax-exempt non-retainer clients during the past year.

There are 20 professional consultants. Fees are payable in hard and soft dollars.

Clients include Georgia-Pacific, Chicago Police, Central Pension Fund IUOE and the MacArthur Foundation.

James F. Knupp is client contact.

Eppler Guerin & Turner Pension Consulting
1445 Ross Ave., Suite 2300, Dallas, Texas 75201; (214) 880-9000

Eppler Guerin & Turner Pension Consulting, a subsidiary of The Principal Financial Group, provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital and GIC manager selection, performance measurement and analysis.

The firm has special expertise in providing individualized service.

Of the 26 clients on retainer, 23 are corporate,

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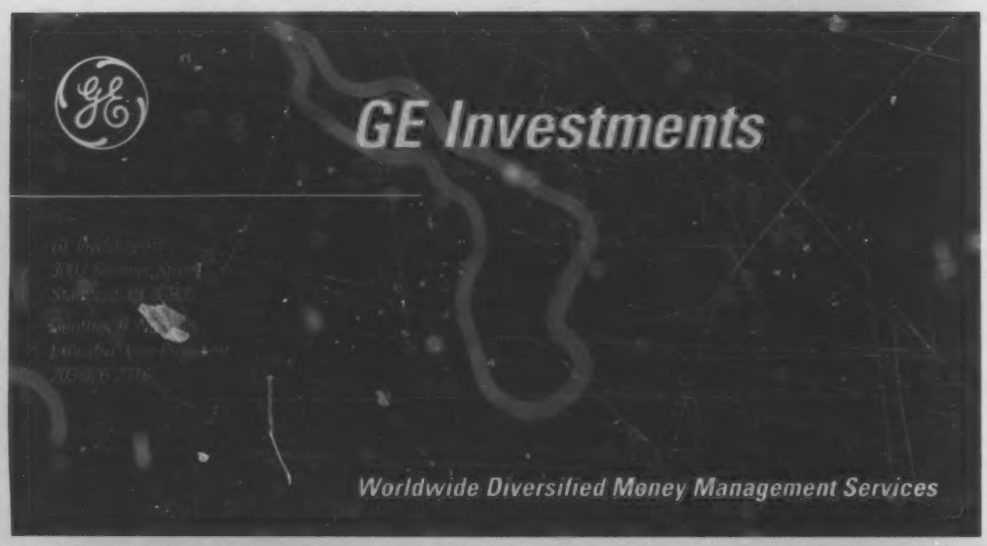
Hong Kong: Tél: (852) 525.52.31 Fax: (852) 584.59.284.



two are public and one is foundation/endowment.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include City of Dallas, H.E. Butt Grocery, VIA Transit Authority and Dallas Area Rapid Transit.

John A. Pickett is the client contact.

Evaluation Associates Inc.
200 Connecticut Ave., Norwalk, Conn. 06854; (203) 855-2259

Evaluation Associates Inc., a subsidiary of MONY Financial Services, provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placement, futures/options and GIC manager selection, performance measurement and analysis.

The firm also offers several publications and funds management.

The firm provides research services relating to performance evaluation and attribution for domestic and foreign equity advisers to the investment management industry.

The firm has special expertise in evaluating and selecting managers.

Of the 80 tax-exempt clients on retainer, 50 are corporate, 10 are public, three are union and 17 are foundation/endowment. The firm also provided services to 12 tax-exempt non-retainer clients during the past year, of which eight were corporate, one was union and three were foundation/endowment.

There are eight professional consultants. Fees are payable in hard and soft dollars.

The firm offers two commingled group trusts and 15 customized funds.

Clients include Colgate Palmolive, Martin Marietta, City of Baltimore and Pennsylvania Public Schools.

Robert B. Mayerick is client contact.

F

Financial Guaranty Corp.
7301 Ohms Lane, Suite 310, Edina, Minn. 55439; (612) 893-1334

Financial Guaranty Corp., with special expertise in guaranteed investment contracts, provides GIC/BIC strategy analysis, issuer selection, credit analysis, portfolio structuring and liquidity analysis.

Of the 10 tax-exempt clients on retainer, nine are corporate and one is union. The firm also provided services to 24 tax-exempt non-retainer clients during the past year, of which 22 were corporate, one was public and one was union.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Toro Co., Federal National Mortgage Association, Farmers Union Central Exchange and Minnesota Power Co.

Glen A. Happe is the client contact.

Gifford Fong Associates
1600 Riviera Ave., Suite 285, Walnut Creek, Calif. 94596; (415) 932-1910

Gifford Fong Associates, a subsidiary of Prudential Insurance Co., provides development of investment policies and objectives and development of appropriate domestic and international asset allocation.

The firm provides full range of research and application of theoretical concepts to fixed-income and equity investment managers.

The firm has special expertise in performance attribution and quantifying and controlling risk in fixed-income portfolio management strategies.

During the past year, the firm made further developments in security valuation, including CMOs and futures and options.

There are 15 professional consultants. Fees are payable in hard and soft dollars.

Tina Norris is the client contact.

Fund Evaluation Group
414 Walnut St., Suite 812, Cincinnati, Ohio 45202; (513) 977-4400

Fund Evaluation Group provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, futures/options and GIC manager evaluation, selection, performance measurement and analysis.

The firm has special expertise in insurance company and endowment/foundation consulting, risk evaluation and fixed-income analysis.

Of the 80 tax-exempt clients on retainer, 45 are corporate, two are public, eight are union and 25 are foundation/endowment. The firm also provided services to four tax-exempt non-retainer clients during the past year, of which two were corporate and two were foundation/endowment.

There are six professional consultants. Fees are payable in hard and soft dollars.

Clients include Indiana University, Michigan Legislative Retirement System and Michigan State University Foundation.

Brad Eden is the client contact.

G

Global Asset Management Associates Inc.
955 Park Ave., New York, N.Y. 10028; (212) 744-0640

Global Asset Management Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and foreign and private placements performance analysis.

The firm provides assistance to non-U.S. portfolio managers interested in entering the U.S. market, and has special expertise in global investment strategies.

The firm has one corporate and one public long-term, non-retainer, tax-exempt client. The firm also provided services to one corporate tax-exempt non-retainer clients during the past year.

There is one professional consultant. Fees are payable in hard dollars.

A.J. Warner is the client contact.

Griffin & Associates
6114 LaSalle Ave., Suite 294, Oakland, Calif. 94611; (415) 531-7977

Griffin & Associates provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., private placements and GIC/BIC manager evaluation and

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selection. Additional performance analysis is offered for U.S. managers.

The firm has special expertise in plan design and implementation for defined benefit and defined contribution plans.

Of the three tax-exempt clients on retainer, two are corporate one is a foundation/endowment. The firm also provided services to seven tax-exempt non-retainer clients during the past year, of which six were corporate and one was a foundation/endowment.

There are two professional consultants. Fees are payable in hard and soft dollars.

John J. Griffin is the client contact.

H

Hamilton & Co. Inc.

101 Carnegie Center, Princeton, N.J. 08540; (609) 452-0300

Hamilton & Co. Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection, performance measurement and analysis.

The firm also offers Sharpshooter, a monitoring and reconciliation service that checks all activities that occur in the custodial and investment management area.

Significant changes or developments at the firm in the past year include the addition of cash management and portfolio liquidity consulting services.

There are 50 tax-exempt clients on retainer.

There are 11 professional consultants. Fees are payable in hard and soft dollars.

Clients include the American Automobile Association, Fairfax County Educational Employees Supplemental Retirement System and TECO Energy.

Susan C. Lohuis and Neil T. Johnson are the client contacts.

Hamilton Consulting Services

2 N. LaSalle, Chicago, Ill. 60602; (312) 444-2108

Hamilton Consulting Services, a subsidiary of Hamilton Investments, provides development of investment policies and objectives; development of appropriate asset allocation; and U.S. manager evaluation, selection, performance measurement and analysis.

The firm provided services to eight tax-exempt non-retainer clients during the past year, of which seven were corporate and one was a foundation/endowment.

There are two professional consultants. Fees are payable in hard and soft dollars.

Barry K. Mendelson is the client contact.

J.A. Hannah Investment Advisory Service Inc.

99 Summer St., Suite 1620, Boston, Mass. 02110; (617) 737-8484

J.A. Hannah Investment Advisory Service Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital and GIC manager evaluation, selection and performance measurement. Additional performance analysis is offered for U.S., foreign, real estate and GIC managers.

The firm also offers proxy monitoring and cost analysis.

The firm has special expertise in performance attribution analysis.

Of the 22 tax-exempt clients on retainer, five are corporate, 15 are public and two are union.

There are three professional consultants. Fees are payable in hard dollars.

Clients include Middlesex County, HP Hood, Boston Whaler and the City of Haverhill.

Susan Flynn is the client contact.

Robert Harrell & Associates

1120 Lakeside Square, 12377 Merit Drive, Dallas, Texas 75251; (214) 934-7811

Robert Harrell & Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate, futures/options and GIC manager selection, performance measurement and additional analysis. Venture capital manager selection also is offered.

The firm has special expertise in the integration of actuarial policies for defined benefit plans and spending and investment policies for endowments.

Of the 14 tax-exempt clients on retainer, nine are corporate, one is public and four are foundation/endowment.

There are three professional consultants. Fees are payable in hard dollars.

Clients include E-Systems, Trinity University, Mid-America Dairymen and Luby's Cafeterias.

Brian K. Hayes is the client contact.

B. Hauptman & Associates

58 E. Burlington, Fairfield, Iowa 52556; (515) 472-8581

B. Hauptman & Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S. manager evaluation and selection.

The firm also offers private limited partnership and hedge fund consulting.

The firm has special expertise in non-traditional investment strategies, including hedge funds.

During the past year, the firm increased its hedge fund data base to 350 funds and established the Genesis Capital Fund.

There are two professional consultants. Fees are payable in hard and soft dollars.

William H. Hurlin is the client contact.

Hewitt Associates

100 Half Day Road, Lincolnshire, Ill. 60069; (708) 295-5000

Hewitt Associates provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, futures/options and GIC manager selection, performance measurement and analysis.

The firm has special expertise in manager monitoring, asset and asset/liability modeling and value-added analysis.

Of the 60 tax-exempt clients on retainer, 55 are corporate, one is public, one is union and three are foundation/endowment. The firm also provided services to 100 non-retainer tax-exempt clients during the past year, of which 80 were corporate and 20 were foundation/endowment.

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Copley Real Estate Advisors—One of the nation's top equity real estate managers. Copley's specialty is developmental joint ventures with experienced local developers.

Marlborough Capital Advisors—Invests in private mezzanine securities of established small to midsized companies. Marlborough's professionals are proficient in negotiating, structuring, and pricing deals.

Loomis, Sayles & Company—One of the oldest and most respected investment counseling firms. Loomis is widely recognized for its extensive research capabilities.

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There are 18 professional consultants. Fees are payable in hard and soft dollars.

Clients include AMP, Adolph Coors, Southland and Upjohn.

Ronald A. Jones is the client contact.

Higgins Associates
124 Mount Auburn St., Cambridge, Mass. 02138; (617) 864-8200

Higgins Associates provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign and venture capital manager selection, performance measurement and analysis.

The firm also acts as a manager of portfolios of mutual funds, and has special expertise in the control of investment risk for plan portfolios.

The firm provided services to 18 tax-exempt non-retainer clients during the past year, of which 10 were corporate and eight were public.

There are four professional consultants. Fees are payable in hard dollars.

Clients include Western Union, Connecticut Conference of Municipalities, Tufts Medical and Addison Wesley.

Edwin M. Higgins is the client contact.

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Fixed income performance based on Employee Benefit Bond Fund. Source: SEI

A. Foster Higgins & Co. Inc.
212 Carnegie Center, Princeton, N.J. 08543; (609) 520-2500

A. Foster Higgins & Co. Inc., a subsidiary of Johnson & Higgins, provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate and GIC manager selection and performance measurement; and additional performance analysis of U.S. and GIC managers.

The firm provides annual survey information of GIC/BIC carrier capacity and plan sponsor investment options to the investment management industry.

The firm has special expertise in asset/liability modeling; investment policy/objective setting; GIC/BIC consulting; annuity placements; and GIC investment management.

There are eight professional consultants. Fees are payable in hard dollars.

Brian C. Ternoey is the client contact.

Holbein Associates Inc.
17304 Preston Road, Suite 836, Dallas, Texas 75252; (214) 733-6898

Holbein Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, futures/options and GIC manager evaluation, selection and performance measurement. Additional performance analysis is available for all investment classes except GICs.

The firm has special expertise in asset liability simulation and manager mix analysis for appropriate risk/reward levels within asset categories.

Of the six tax-exempt clients on retainer, three are corporate and three are public. The firm also provided services to one corporate and one public tax-exempt non-retainer client during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Texas Teachers, Texas Permanent School Fund, Texas County and District Retirement and Stewart & Stevenson Services.

Richard Holbein is the client contact.

I

Ibbotson Associates Inc.
8 S. Michigan Ave., Suite 700, Chicago, Ill. 60603; (312) 285-1000

Ibbotson Associates Inc. provides development of investment policies, investment strategy research, investment product development and asset allocation.

Asset allocation, strategy research and product development are implemented using state-of-the-art methods in optimization, simulation and forecasting to translate data and knowledge bases into research output.

Laurence B. Siegel is the client contact.

Institutional Fund Consultants Inc.
2423 American Lane, Madison, Wis. 53704; (608) 244-3541

Institutional Fund Consultants Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S. and foreign manager selection and performance measurement. Additional analysis also is offered for U.S. managers.

The firm also offers mutual fund selection for 401(k) plans and smaller employee benefit plans.

The firm has special expertise in the development of comprehensive investment policy statements and investment strategy for the longer term.

Of the 17 tax-exempt clients on retainer, 15 are corporate, one is union and one is a foundation/endowment. The firm also provided services to six tax-exempt non-retainer clients during the past year, of which four were corporate and two were public.

There are two professional consultants. Fees are payable in hard and soft dollars.

Clients include Gillett Group, Painters District Council No. 5, Sedgwick James and Reid Memorial Hospital.

Gordon L. King is the client contact.

Institutional Property Consultants Inc.
4330 LaJolla Village Drive, Suite 310, San Diego, Calif. 92122; (619) 458-1120

Institutional Property Consultants Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and manager evaluation, selection, performance measurement and analysis, all for real estate.

The firm also offers definition of real estate investment objectives and policy; establishment of transaction review and asset management processes; due diligence on prospective property investments; definition of environmental hazard policy; and design of manager fee schedules.

The firm has special expertise in the blending of theoretical consulting and hands-on real estate experience.

Of the 34 tax-exempt clients on retainer, eight are corporate, 21 are public, two are union and three are foundations/endowments. The firm also provided services to five tax-exempt non-retainer clients during the past year, of which two were corporate, two were public and one was a

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foundation/endowment.

There are 10 professional consultants. Fees are payable in hard dollars.

Paul H. Saylor and Barbara R. Cambon are the client contacts.

Institutional Shareholder Services Inc.

3333 K St. N.W., Suite 400, Washington, D.C. 20007; (202) 333-0339

Institutional Shareholder Services Inc. provides development of investment policies and objectives and U.S. and foreign performance measurement.

For the investment management industry, the firm provides guidance on fiduciary and legal obligations, specializing in proxy voting policy, procedure, analysis and record keeping.

The firm has special expertise in corporate performance analysis, proxy voting policy development, board of director selection assistance, corporate governance and proxy voting analysis and recommendation.

Significant changes or developments at the firm in the past year include the introduction of two services: the Voting Agent Service for institutional investors wishing to contract out their entire proxy voting operations; and the Proxy Monitor Service for corporate plan sponsors who delegate proxy voting authority to third parties.

Of the 92 tax-exempt clients on retainer, 65 are corporate, 20 are public, three are union and four are foundation/endowment. The firm also provided services to 123 non-retainer tax-exempt clients during the past year, of which 80 were corporate, 30 were public, six were union and seven were foundation/endowment.

There are 15 professional consultants. Fees are payable in hard and soft dollars.

Francis T. Corcoran is the client contact.

International Investment Group Inc.

17 Madison Ave., Port Chester, N.Y. 10573; (914) 939-1543

International Investment Group Inc. provides overall development of investment policies and objectives and development of appropriate asset allocation. U.S. and international/global performance measurement and analysis are offered.

The firm also offers stock index optimization, global asset optimization, multicurrency optimization and option hedging strategies. Computerized consulting services include in-house quote customization, trading strategy computerization, investment strategy simulation research and an accounting/portfolio monitoring platform.

The firm has special expertise in innovative global asset optimization.

Significant developments at the firm in the past year include the firm's continued shift in emphasis toward global optimization products from options hedging.

There are five corporate tax-exempt clients on retainer.

There are 12 professional consultants. Fees are payable in hard and soft dollars.

Kurt Hiebaum is the client contact.

InterSec Research Corp.

66 Gate House Road, Stamford, Conn. 06902; (203) 348-7101

InterSec Research Corp., an international investment management consultant, provides development of international and global investment policies and objectives; development of appropriate international asset allocation; and international manager evaluation, selection, performance measurement and analysis.

The firm provides international and global investment diversification programs to the investment management industry, including simulations, asset allocations, objective setting, manager monitoring to include accounting and performance analysis, international analytical research and multicurrency portfolio accounting and software.

Of the 29 tax-exempt clients on retainer, 21 are corporate, seven are public and one is a foundation/endowment. The firm also provided services to 36 tax-exempt non-retainer clients during the past year, of which 28 were corporate, six were public and two were foundation/endowment.

There are 17 professional consultants. Fees are payable in hard and soft dollars.

Clients include Virginia Retirement, Owens-Illinois, State Authorities Superannuation, Caisse de Depot, Arizona Public Service and IMF.

Arthur W. McCain Jr. is the client contact.

Investment Management Inc.

4870 S. Lewis, Suite 180, Tulsa, Okla. 74105; (918) 742-3031

Investment Management Inc., a subsidiary of Rubottom, Dudash and Associates Inc., provides development of investment policies and objectives; development of appropriate asset allocation; and U.S. manager performance measurement.

The firm provides investment advisory services to the investment management industry.

The firm has special expertise in portfolio management.

The firm has eight corporate tax-exempt clients on retainer.

There are two professional consultants. Fees are payable in hard dollars.

D.J. Rubottom is client contact.

Investment Management Evaluation Service

Nashville City Center, Suite 800, Nashville, Tenn. 37219; (615) 780-9360

Investment Management Evaluation Service, a subsidiary of Equitable Securities Corp., provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, futures/options and GIC manager selection and performance measurement. Additional performance analysis is offered for U.S., foreign, futures/options and GIC investments.

The firm has special expertise in qualitative considerations, especially in regard to manager searches, report customization, and special projects.

Significant changes or developments at the firm in the past year include the addition of Hermitage Associates, for consulting to endowments and foundations.

Of the 35 tax-exempt clients on retainer, 28 are corporate, two are public and five are foundation/endowment. The firm also provided services to five corporate tax-exempt non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Metro Nashville Public Employees, Nashville Teachers, Webb School Endowment and Memorial Hospital.

Ward Cammack is the client contact.

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520 Madison Avenue • New York, NY 10022 • 212-980-8400

Investment Management Group, Dain Bosworth Inc.

100 Dain Tower, Minneapolis, Minn. 55402; (612) 371-7688

The Investment Management Group of Dain Bosworth Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign and GIC manager selection and performance measurement.

There are 15 corporate tax-exempt clients on retainer. The firm also provided services to 204 tax-exempt non-retainer clients during the past year, of which 180 were corporate, one was public, three were union and 20 were foundation/endowment.

There are 15 professional consultants. Fees are payable in hard and soft dollars.

Betsy Swiderski is the client contact.

Investor Responsibility Research Center Inc.

1755 Massachusetts Ave., Suite 600, Washington, D.C. 20036; (202) 234-7500

The Investor Responsibility Research Center Inc. provides development of investment policies and objectives and U.S. and foreign proxy research, portfolio screening and proxy voting guidelines.

The firm provides a proxy voting software system and individualized research that may be used for portfolio screening to the investment management industry.

The firm has special expertise in corporate governance issues and social issues.

Significant changes or developments at the firm in the past year include the establishment of Global Shareholder, which provides research on voting proxies at non-U.S. companies; and "Environmental Information Service," which provides environmental profiles of major companies.

There are 15 professional consultants. Fees are payable in hard and soft dollars.

David C. Popper is the client contact.

J

Johnston, Dragon & Associates

238 Nassau St., Princeton, N.J. 08542; (609) 497-1616

Johnston, Dragon & Associates provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, futures/options and GIC manager selection. Performance measurement and analysis is offered for U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC investments.

Of the eight tax-exempt clients on retainer, five are corporate and three are union.

There are three professional consultants. Fees are payable in hard and soft dollars.

Charles L. Johnston is the client contact.

K

Ronald A. Karp Associates

47 Maple St., Summit, N.J. 07901; (201) 522-1414

Ronald A. Karp Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate and GIC manager selection; U.S. and real estate performance measurement; and additional performance analysis for real estate and GIC investments.

The firm has special expertise in real estate, asset allocation, international and GIC negotiations.

Of the 15 tax-exempt clients on retainer, four are corporate, 10 are public and one is union. The firm also provided services to six non-retainer tax-exempt clients during the past year, of which five were corporate and one was public.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Pennsylvania State Employes, Los Angeles Fire and Police, Ohio School Employees and Saatchi & Saatchi.

Sheri L. Kole is the client contact.

Kidder, Peabody PRIME Consulting Group

20 Exchange Place, New York, N.Y. 10005; (212) 510-5537

Kidder, Peabody PRIME Consulting Group, a unit of Kidder, Peabody & Co., a subsidiary of GE Financial Services, provides development of investment policies and objectives; development of appropriate asset allocation; U.S. and foreign manager selection and performance measurement; and performance attribution and risk analysis for U.S. investments.

The firm has special expertise in asset allocation, investment policy, manager selection and performance evaluation.

Of the 405 tax-exempt clients on retainer, 350 are corporate, 30 are public, 10 are union and 15 are foundation/endowment.

There are 25 professional consultants. Fees are payable in hard and soft dollars.

Neil Wolfson is the client contact.

KPMG Peat Marwick

345 Park Ave., New York, N.Y. 10154; (212) 872-5973

KPMG Peat Marwick provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection and analysis. Performance measurement is offered for U.S. investment managers.

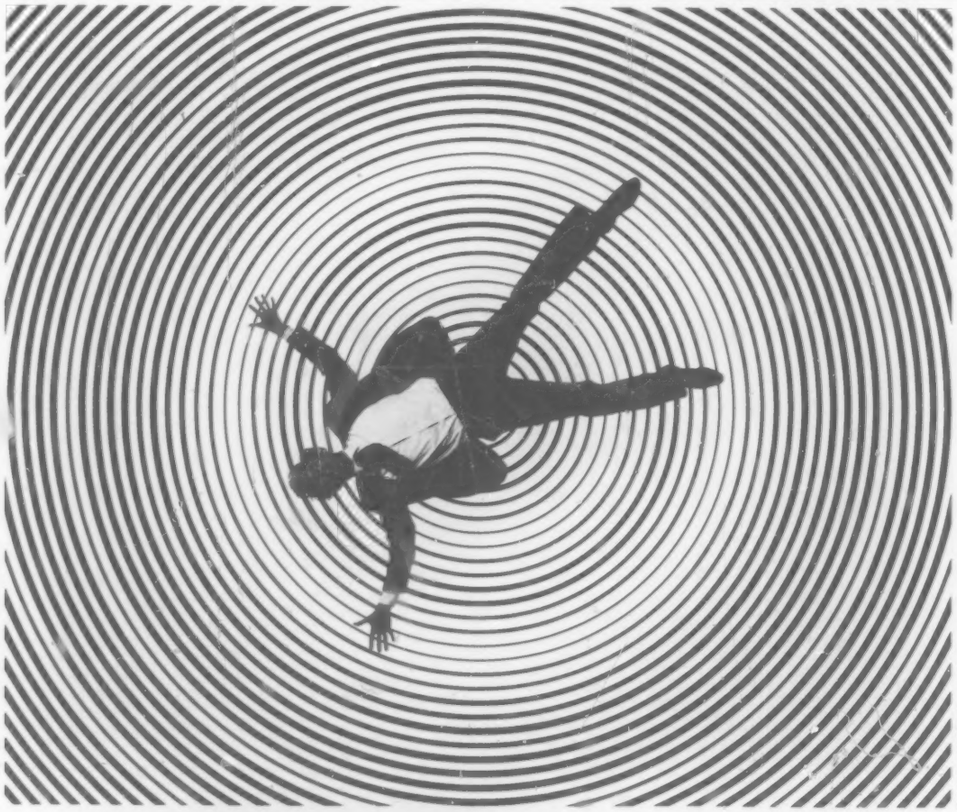
The firm also offers investment-related research papers and surveys.

It has special expertise in international investment consulting.

There are 10 professional consultants. Fees are payable in hard dollars.

The client contacts are Evelyn Morgner in New York; Keith Bannister in London; Lloyd Foight in Short Hills, N.J.; and for real estate, Paula Konikoff in New York.

The future of guaranteed investment contracts will be highlighted in the March 18 issue.



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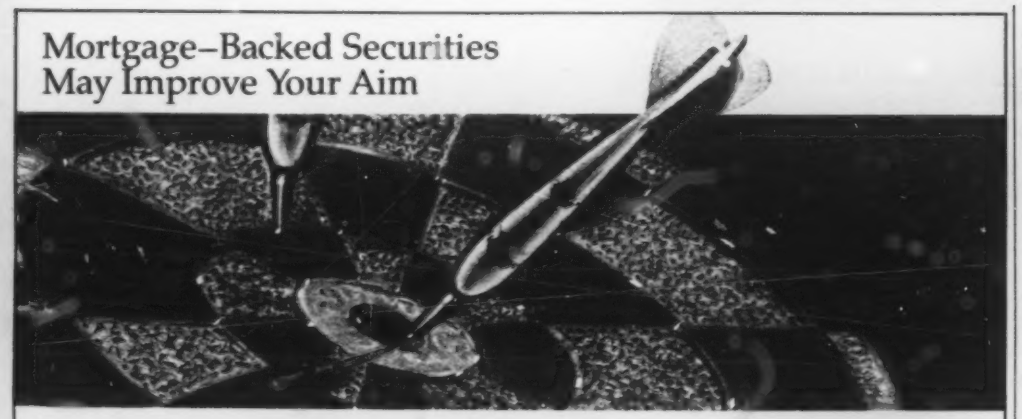

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L

Laventhol & Horwath
425 Market St., Suite 3600, San Francisco, Calif. 94105; (415) 896-1800

Laventhol & Horwath provides development of real estate investment policies, objectives and asset allocation; and real estate manager selection, performance measurement and analysis.

The firm also offers due diligence services, workouts, appraisals and strategic planning.

The firm provides due diligence services and appraisals to the investment management industry.

The firm has special expertise in real estate consulting.

There are two corporate tax-exempt clients on retainer. The firm also provided services to 19 tax-exempt non-retainer clients during the past year, of which four were corporate, 14 were public and one was union.

There are 12 professional consultants. Fees are payable in hard dollars.

Clients include Allied-Signal and General Electric.

J. Richard Rosenberg is the client contact.

Legg Mason Investment Consulting Group
111 S. Calvert St., Baltimore, Md. 21202; (301) 539-4692

Legg Mason Investment Consulting Group, a subsidiary of Legg Mason Wood Walker Inc., provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign and GIC manager selection; and U.S. manager performance measurement and analysis.

The firm has special expertise in strategic asset allocation modeling, development and implementation of investment policies, and customized evaluations.

There are 19 professional consultants. Fees are payable in hard and soft dollars.

William G. McVay is client contact.

Lehrer Development and Investments
5555 Del Monte Drive, Suite 802, Houston, Texas 77056; (713) 552-1600

Lehrer Development and Investments provides development of investment policies and objectives; development of appropriate asset allocation; real estate and venture capital manager selection; U.S., foreign, real estate and venture capital performance measurement; and additional performance analysis for U.S. and real estate investments.

The firm also offers all forms of economic and finance consulting and analysis, and litigation support services.

The firm provides economic and financial analysis, with an emphasis on real estate investment, to the investment management industry.

It has special expertise in real estate, banking, finance, economics and litigation support services.

Of the seven tax-exempt clients on retainer, three are corporate, two are public and two are foundation/endowment. The firm also provided services to nine tax-exempt non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard dollars.

Kenneth Eugene Lehrer is the client contact.

Lewis, Bailey Associates
1 Financial Center, Boston, Mass. 02111; (617) 439-3232

Lewis, Bailey Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection and performance measurement; and additional analysis for all but GIC managers.

The firm also offers investment and financial planning research reports.

The firm has special expertise in financial and investment planning, with extensive coverage of venture capital, real estate, global and other non-traditional investments.

Significant changes or developments at the firm in the past year include opening a San Francisco office.

The firm has 300 clients on retainer.

There are 25 professional consultants. Fees are payable in hard and soft dollars.

Clients include Virginia Supplemental, San Francisco Employees, Hewlett-Packard and Blue Cross/Blue Shield of Florida.

Sandra Urie Thorpe is the client contact.

Loewi Managed Account Services Inc.
111 E. Kilbourn Ave., Milwaukee, Wis. 53202; (414) 347-3360

Loewi Managed Account Services Inc., a subsidiary of Loewi Financial Cos. Inc., provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign and GIC manager selection; and U.S. and foreign performance measurement and analysis.

The firm has special expertise in risk analysis.

Of the 25 tax-exempt clients on retainer, 20 are corporate, three are public and two are foundation/endowment. The firm also provided services to 60 non-retainer tax-exempt clients during the past year, of which 50 were corporate, five were public and five were foundation/endowment.

There are five professional consultants. Fees are payable in hard and soft dollars.

Thomas Trebby is the client contact.

Lovett Underwood Neuhaus & Webb
909 Fannin, P.O. Box 4348, Houston, Texas 77210; (713) 853-2085

Lovett Underwood Neuhaus & Webb, a division of Kemper Securities Group Inc., provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate, futures/options and GIC manager selection, performance measurement and analysis.

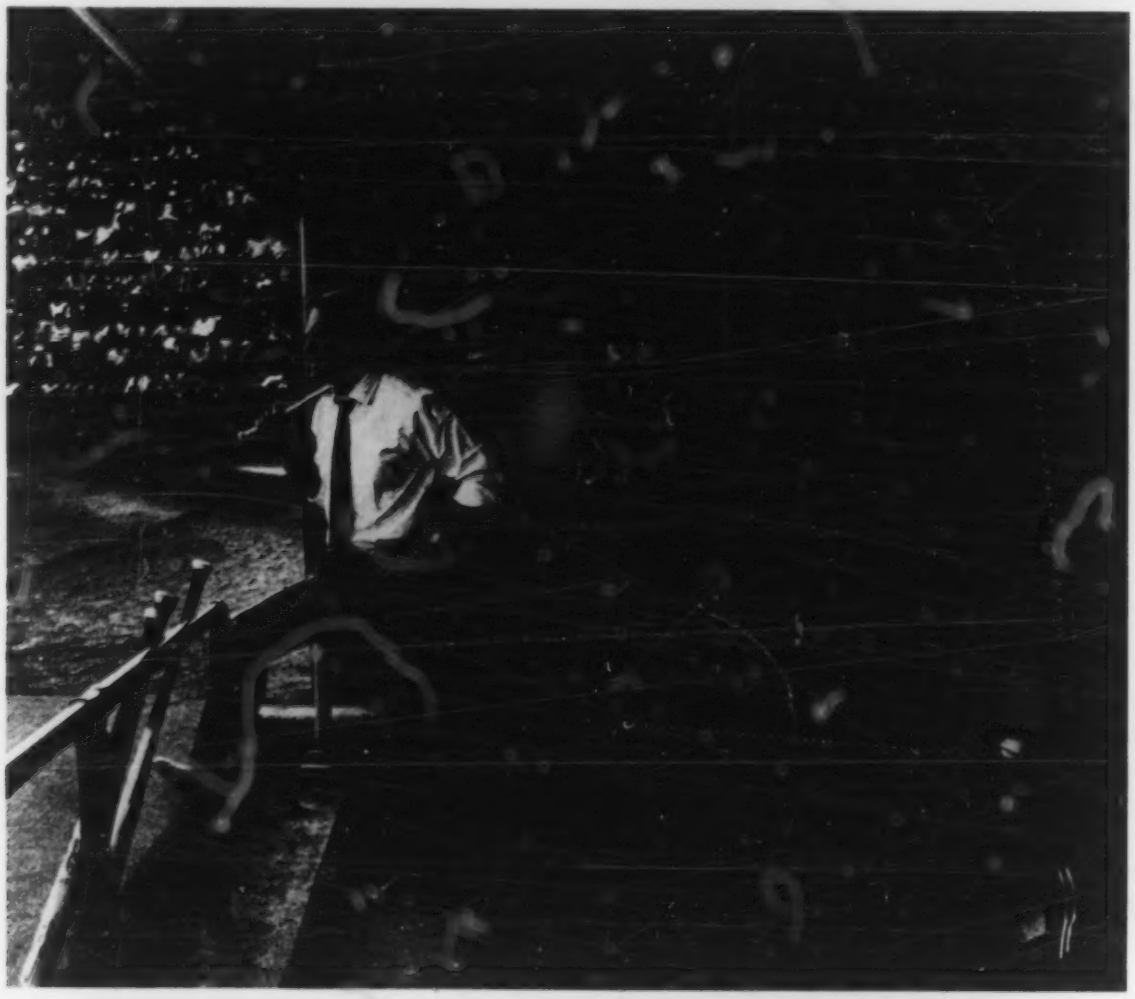
The firm has special expertise in the recording of trades, performance analyses and performance review reports.

Fees are payable in hard and soft dollars.

Jack Garland Glaw is client contact.

Lowry Consulting Group Inc.
2859 Paces Ferry Road, Suite 1900, Atlanta, Ga. 30339; (404) 431-1100

Lowry Consulting Group Inc., a subsidiary of



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The firm has special expertise in asset allocation, liability analysis, performance attribution, FASB 87 analysis and utility pension plans.

Significant changes or developments at the firm in the past year include the addition of three consultants.

Of the 65 tax-exempt clients on retainer, 60 are corporate and five are foundation/endowment.

There are 10 professional consultants. Fees are payable in hard dollars.

Clients include Houston Industries, USF&G, Fairey Industries and McCormick.

Victor A. Bell is the client contact.

Marco Consulting Group

54 W. Hubbard St., Suite 205,
Chicago, Ill. 60610; (312) 527-4200

Marco Consulting Group provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., real estate, venture capital, private placements, futures/options and GIC manager selection, performance measurement and analysis.

The firm also offers a proxy voting service for clients and audits plans' master custodians.

The firm serves Taft-Hartley plans exclusively.

Significant changes or developments at the firm in the past year include the addition of two staff members.

There are 47 union tax-exempt clients on retainer.

There are four professional consultants. Fees are payable in hard and soft dollars.

Jack Marco is the client contact.

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Marquette Associates provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection, performance measurement and analysis.

The firm has special expertise in insurance company assets, health care organizations, 401(k) and 403(b) plans, and middle-market corporate plans.

Of the 41 clients on retainer, 30 are corporate, two are public, six are union and three are foundation/endowment.

There are five professional consultants. Fees are payable in hard dollars.

Clients include Viacom International, Blue Cross/Blue Shield of Wisconsin and Golden Rule Insurance Co.

Brien O'Brien is the client contact.

James P. Marshall Inc.

10 Bay St., Suite 614, Toronto, Ontario
M4N 1K9; (416) 361-0225

James P. Marshall Inc. provides development of investment policies and objectives; development of appropriate asset allocation; Canadian, international, real estate and futures/options manager selection, performance measurement and analysis.

The firm has special expertise in serving the Canadian pension market.

Significant changes or developments at the firm in the past year include the addition of a senior consultant.

Of the 32 tax-exempt clients on retainer, 12 are corporate, 15 are public, four are union and one is foundation/endowment. The firm also provided services to four corporate tax-exempt non-retainer clients during the past year.

There are five professional consultants. Fees are payable in hard dollars.

Clients include Westinghouse Canada, Procter & Gamble, Coca-Cola and the University of Regina.

M. Ann Marshall is the client contact.

William M. Mercer Asset Planning Inc.

1417 Lake Cook Road, Deerfield, Ill.
60015; (708) 317-7400

William M. Mercer Asset Planning Inc., a subsidiary of Marsh & McLennan Cos. Inc., provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real state, venture capital, LBO, futures/options and GIC manager selection and performance measurement. Performance measurement also is offered for private placements; and additional performance analysis is offered for U.S., foreign, real estate, futures/options and GIC investments.

The firm also offers performance attribution and transaction cost services.

The firm has special expertise in asset/liability modeling, performance interpretation and insured investment placement.

Significant changes or developments at the firm in the past year include the firm's name change from Mercer Meidinger Hansen Asset Planning Inc.

Of the 357 tax-exempt clients on retainer, 176 are corporate, 119 are public, 40 are union and 22 are foundation/endowment. The firm also provided services to 141 tax-exempt non-retainer clients during the past year, of which 111 were corporate, 16 were public, 12 were union and two were foundation/endowment.

There are 76 professional consultants. Fees are payable in hard and soft dollars.

Clients include Arizona State Retirement, Cincinnati Bell, Wisconsin Electric Power and Major League Baseball Players.

The client contacts in Chicago are Anita Andren, Don Brackey, Barbara Brightman and Jim Hiner.

Merrill Lynch Consulting Services

717 Fifth Ave., 9th Floor, New York,
N.Y. 10022; (212) 415-7956

Merrill Lynch Consulting Services, a department of Merrill Lynch, Pierce, Fenner & Smith, a subsidiary of Merrill Lynch & Co., provides development of investment policies and objectives; development of appropriate asset allocation; U.S. and foreign manager selection; and performance measurement and analysis for U.S., foreign, real estate, venture capital and futures/options investments.

The firm has special expertise in performance measurement.

Of the 520 clients on retainer, 285 are corporate, 80 are public, 60 are union and 95 are foundation/endowment.

There are 35 professional consultants. Fees are payable in hard and soft dollars.

David T. Ferner is the client contact.

The Monitor Group Inc.

7649 Leesburg Pike, Falls Church, Va.
22043; (703) 821-6661

The Monitor Group Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S. and foreign manager selection, performance measurement and analysis.

It specializes in serving small businesses and not-for-profit organizations.

Of the 14 tax-exempt clients on retainer, 12 are corporate and two are foundation/endowment. The firm also provided services to 15 tax-exempt non-re-

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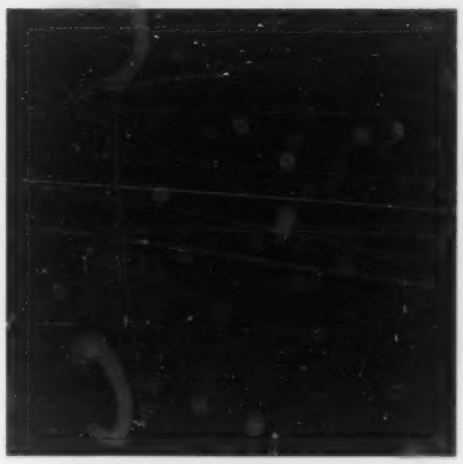

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tainer clients during the past year, of which 12 were corporate and two were foundation/endowment.

There are two professional consultants. Fees are payable in hard dollars.

Clients include Hoven Corp., D.G. Fraser, J.A. Harris and D.C. Fitzgerald.

H. Lynn Hopewell is the client contact.

Monitoring and Evaluation Services Inc.

3375 Park Ave., Suite 3006, New York, N.Y. 11793; (800) 962-1917

Monitoring and Evaluation Services Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, futures/options and GIC manager selection, performance measurement and analysis.

The firm provides the following to the investment management industry: portfolio and equity and fixed-income transaction cost analysis; and customized graphics illustrating relative return.

The firm has special expertise in monitoring transaction costs for both equity and fixed-income transactions, including a commission recapture program.

Of the 12 tax-exempt clients on retainer, four are public and eight are union. The firm also provided consulting services to three non-retainer tax-exempt clients in the past year, of which one was public and two were union.

There are two professional consultants. Fees are payable in hard and soft dollars.

Clients include Communications Workers of America Employees; International Association of Fire Fighters; and Service Employees of Upstate New York.

John T. Renck is the client contact.

Morgan Keegan & Co. Inc.

50 N. Front St., Memphis, Tenn. 38103; (901) 524-4100

Morgan Keegan & Co. Inc. provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, futures/options and GIC manager selection and performance measurement; and additional performance analysis for U.S. and futures/options investments.

The firm also offers pension plan design and implementation.

The firm provides equity and fixed-income research to the investment management industry.

The firm has special expertise in manager search and performance measurement.

Of the 14 clients on retainer, seven are corporate, two are public, one is union and four are foundation/endowment. The firm also provided services to 204 tax-exempt non-retainer clients during the past year, of which 145 were corporate, six were public, 27 were union and 26 were foundation/endowment.

There are six professional consultants. Fees are payable in hard and soft dollars.

J. Blake Taylor is the client contact.

N

New England Pension Consultants Inc.

253 Summer St., Suite 210, Boston, Mass. 02210-1114; (617) 737-1960

New England Pension Consultants Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection and performance measurement. The firm provides additional analysis in all those areas except LBO investments.

The firm also offers analysis of the impact of currency and country selection; stock and sector selections; policy vs. manager impact; current, prospective and historical risk analyses; and strategic vs. tactical asset allocation impact.

The firm has special expertise in structured portfolios, FASB 87, hedging strategies, Taft-Hartley and public fund consulting, custody searches and socially restricted investments.

Significant changes or developments at the firm in the past year include the addition of custody search capability.

Of the 55 tax-exempt clients on retainer, 31 are corporate, five are public, 12 are union and seven are foundation/endowment.

There are three professional consultants. Fees are payable in hard and soft dollars.

Richard M. Charlton is the client contact.

Noble Lowndes Asset Consulting Group

33 Evergreen Place, East Orange, N.J. 07018; (201) 675-8900

Noble Lowndes Asset Consulting Group provides development of investment policies and objectives; development of appropriate asset allocation; and U.S. and foreign manager selection and performance measurement.

The firm has special expertise in servicing the middle market, targeting funds between $2 million and $50 million.

There are 10 professional consultants. Fees are payable in hard dollars.

Natalka Bukalo is the client contact.

The Largest Pension Funds issue will be published Jan. 21.

O

O'Shaughnessy Capital Management Inc.

740 River Drive, Suite 18F, St. Paul, Minn. 55116; (612) 699-2334

O'Shaughnessy Capital Management Inc. provides development of appropriate asset allocation and U.S. manager performance measurement and analysis.

The firm also offers the development of specialized multifactor profiles and benchmarks.

The firm provides long-term asset allocation and specialized multifactor equity selection models to the investment management industry.

The firm has special expertise in creating multifactor profiles and shadow benchmarks of active equity managers.

Fees are payable in hard and soft dollars.

James P. O'Shaughnessy is the client contact.

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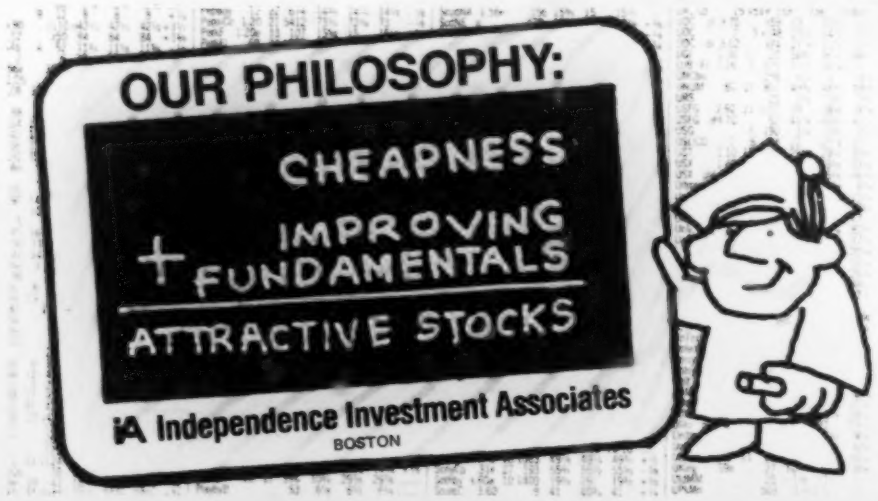


P

PaineWebber Inc.-Managed Accounts Services
1200 Harbor Blvd., Weehawken, N.J. 07087; (201) 902-3128

PaineWebber Inc. — Managed Accounts Services Department provides development of investment policies and objectives; U.S. and futures/options manager selection; U.S. and foreign performance measurement; and additional performance analysis for U.S. investments.

The firm provides the following to the investment management industry: quarterly performance monitor, the technical center for manager search, dedicated trading desk and fee billing capabilities.

The firm has special expertise in manager search and due diligence.

The firm provided services to 3,000 non-retainer tax-exempt clients during the past year, of which 2,500 were corporate, 300 were public, 100 were union and 100 were foundation/endowment.

There are 50 professional consultants. Fees are payable in hard and soft dollars.

Bruce A. Bursey is the client contact.

Peirce Park Group
2600 W. Seventh St., Suite A, Wilmington, Del. 19805; (302) 429-0982

Peirce Park Group provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign and real estate manager selection and performance measurement; performance measurement for GIC investments; and additional performance analysis for U.S. investments.

The firm has special expertise in asset liability simulation and real estate.

Significant changes or developments at the firm in the past year include adding offices in Roanoke, Va., and Annapolis, Md.

There are five professional consultants. Fees are payable in hard and soft dollars.

Michael W. Shone is the client contact.

Pension Consulting Alliance
1435 Gardena Ave., Suite 13, Glendale, Calif. 91204; (818) 240-0372

Pension Consulting Alliance provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection, performance measurement and analysis.

Significant changes or developments at the firm in the past year include the addition of a staff member.

Of the seven tax-exempt clients on retainer, six are public and one is foundation/endowment.

There are two professional consultants. Fees are payable in hard dollars.

Clients include California State Teachers, State of Connecticut, Virginia Retirement System and Illinois State Board.

Dellene Arthur is the client contact.

Pension Portfolio Advisors
3 First National Plaza, Suite 1400, Chicago, Ill. 60602; (312) 372-2727

Pension Portfolio Advisors, a subsidiary of Royal Maccabees Life Insurance Co., provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate, venture capital, private placements, futures/options and GIC manager selection, performance measurement and analysis; and LBO performance measurement.

The firm also provides quantified analysis of plan sponsor risk tolerance; manager structure consulting; evaluation of compliance adherence for managers; and custodian/master trustee evaluation.

The firm has special expertise in developing risk tolerance profiles for sponsors and creating appropriate asset allocation strategies; manager structure consulting; and international manager search and evaluation.

Of the 376 tax-exempt clients on retainer, 358 are corporate, 13 are public and five are union. The firm also provided services to 26 tax-exempt non-retainer clients, of which 20 were corporate, three were public and three were union.

There are eight professional consultants. Fees are payable in hard and soft dollars.

Clients include Oakland County Employees; Prince Corp.; CMI Corp.; and Sheet Metal Workers Local 224.

Brian J. Murphy is the client contact.

Pension Realty Advisors Inc.
155 Sansome St., San Francisco, Calif. 941[illegible]; (415) 291-9000

Pension Realty Advisors Inc. provides development of real estate investment policies and objectives; development of appropriate real estate asset allocation; and real estate and private placements manager selection, performance measurement and analysis.

The firm provides customized industry research reports to the investment management industry.

The firm has special expertise in real estate industry research, real estate private placements, industry trends and emerging investment strategies.

There are six professional consultants. Fees are payable in hard dollars.

Paul S. Saint-Pierre is the client contact.

Pensions & Investment Research Consultants Ltd.
40 Bowling Green Lane, London EC1R 0NE, U.K.; (071) 833-4432

Pensions & Investment Research Consultants Ltd. provides development of investment policies and objectives; development of appropriate asset allocation; and foreign and venture capital manager selection and performance analysis.

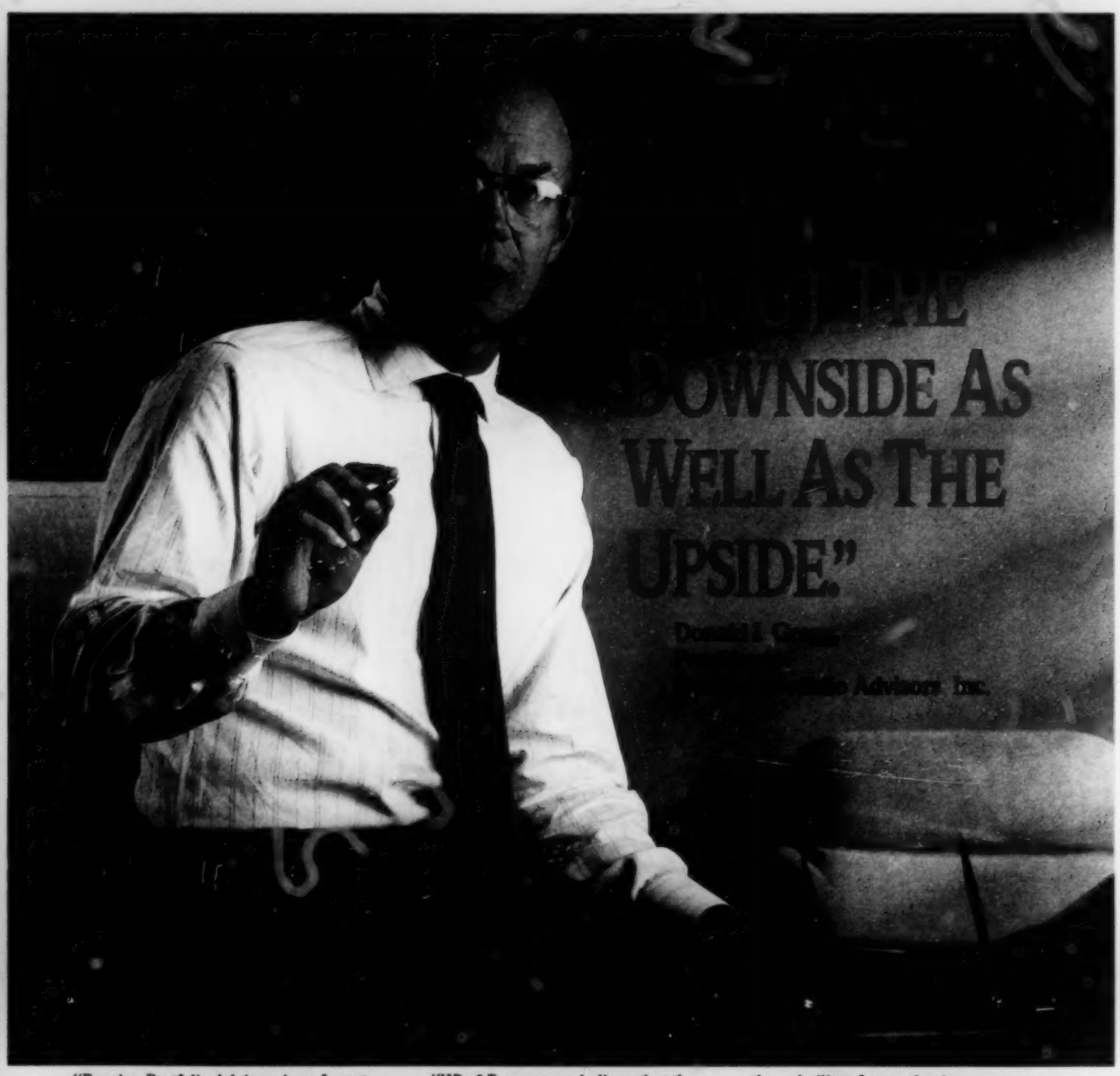
The firm also offers socially responsible investment consulting.

The firm provides the following to the investment management industry: company research, market intelligence, investment analysis and publications.

The firm has special expertise in socially responsible investment, manager selection, investment policy advice, venture capital and U.K. corporate governance and proxy voting. The firm also furnishes advice to trade unions on pension plan bargaining.

Significant changes or developments in the past year include the establishment of a relationship whereby the firm represents IRRC clients on U.K. corporate governance and proxy voting.

Of the 14 tax-exempt clients on retainer, 12 are public and two are union. The firm also provided



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services to two corporate non-retainer tax-exempt clients during the past year.

There are four professional consultants. Fees are payable in hard and soft dollars.

Alan MacDougall is the client contact.

Performance Analytics Inc.

30 S. Wacker Drive, Suite 1502, Chicago, Ill. 60606; (312) 930-9560

Performance Analytics Inc. provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate and GIC manager selection, performance measurement and analysis; and futures/options performance measurement and analysis.

The firm also assists clients in equity style tilting.

The firm provides asset allocation and style tilting information to selected managers.

It has special expertise in asset allocation and style tilting information.

Significant changes or developments at the firm in the past year include the addition of two senior consultants.

Of the 260 tax-exempt clients on retainer, 156 are corporate, 26 are public, 52 are union and 26 are foundation/endowment.

There are seven professional consultants. Fees are payable in hard and soft dollars.

Clients include Zenith, Whitman, Ralston Purina, Bell & Howell and Peoples Energy.

William G. Lowery is the client contact.

Portfolio Consultants Inc.

700 Ackerman Road, Suite 400, Columbus, Ohio 43202; (614) 267-2600

Portfolio Consultants Inc., a subsidiary of Professional Planning Consultants Inc., provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate and private placements manager selection and performance measurement.

There are 30 corporate tax-exempt clients on retainer.

There are six professional consultants. Fees are payable in hard dollars.

Clients include West-Camp Press, Northwest Family Physicians, Friction Materials and Fisher Cast Steel.

Matthew D. Palmer is the client contact.

Prime Buchholz & Associates

1 Harbour Place, Portsmouth, N.H. 03801; (603) 433-1143

Prime Buchholz & Associates provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, futures/options and GIC manager selection, performance measurement and analysis.

The firm has special expertise in pre-retirement planning, custodial search, investment policy development and asset allocation.

Of the 18 tax-exempt clients on retainer, six are corporate, two are public, three are union and seven are foundation/endowment.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Boston College, Rochester General Hospital, Spartanburg County Foundation and Blue Cross/Blue Shield of Rochester.

Jon L. Prime, William F. McCarron and James R. Buchholz are the client contacts.

Q

Quan-Vest Consultants

390 Plandome Road, Manhasset, N.Y. 11030; (516) 365-4619

Quan-Vest Consultants provides development of investment policies and objectives; development of appropriate asset allocation; U.S., real estate and GIC manager selection and performance measurement; and additional performance analysis for U.S. and GIC investments.

The firm offers its computerized analysis of a 2,000-stock universe to the investment management industry.

The firm has special expertise in providing multi-employer plans with the equivalent of an in-house investment supervision department.

Of the 25 tax-exempt clients on retainer, four are corporate, one is public and 20 are union. The firm also provided services to two corporate tax-exempt non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard dollars.

Anthony F. Lotruglio is the client contact.

R

Resource Advisory Inc.

1117 Perimeter Center West, E-302, Atlanta, Ga. 30338; (404) 394-9525

Resource Advisory Inc. provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate and venture capital manager selection; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC performance measurement and analysis.

The firm has special expertise in manager searches and client reports.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include Wake Forest University, the Presbyterian Church in America, Duke Power and Liberty Corp.

Bernard S. Santa Maria is the client contact.

Richards & Tierney Inc.

111 W. Jackson Blvd., 14th Floor, Chicago, Ill. 60604; (312) 461-1100

Richards & Tierney Inc. provides development of investment policies and objectives; development of appropriate asset allocation; U.S. manager selection, performance measurement and analysis; and foreign, real estate, venture capital, LBO, private placements, futures/options and GIC performance measurement. Additional performance analysis also is offered for foreign investments.

The firm also offers a manager allocation service; dynamic completeness funds; benchmark portfolio design, development and maintenance; portfolio performance attribution; portfolio risk analysis; and development and implementation of investment

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need policy.

The firm provides benchmark portfolio design, development and maintenance, and portfolio performance attribution for both domestic and international equities to the investment management industry.

The firm has special expertise in benchmark portfolios, performance attribution, manager allocation, dynamic completeness funds and investment policy development and implementation.

Of the 16 tax-exempt clients on retainer, 10 are corporate, two are public, one is union and three are foundation/endowment.

There are six professional consultants. Fees are payable primarily in hard dollars.

Clients include General Electric, Owens-Illinois, State of Minnesota and Hughes Aircraft.

Thomas M. Richards and Maureen M. Culhane are the client contacts.

Rogers, Casey & Associates

85 Old Kings Highway N., Darien, Conn. 06820; (203) 656-5900

Rogers, Casey & Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection; performance measurement and analysis.

The firm provides the following to the investment management industry: formulation of strategic business plans and advisory services for those interested in evaluating investment managers for potential merger and/or acquisition.

Significant changes or developments at the firm in the past year include the merger of Berg Fiduciary Consultants Inc. into the firm.

Of the 41 tax-exempt clients on retainer, 33 are corporate, three are public, two are union and three are foundation/endowment. The firm also provided services to six non-retainer tax-exempt clients during the past year, of which four were corporate, one was public and one was foundation/endowment.

There are 28 professional consultants. Fees are payable in hard and soft dollars.

Kenneth G. Rogers is the client contact.

Frank Russell Co.

P.O. Box 1616, Tacoma, Wash. 98401; (206) 572-9500

Frank Russell Co. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real state, private placement and GIC manager selection and performance measurement.

The firm provides the following to the investment management industry: equity and real estate indexes, analytical software and asset/liability modeling.

The firm has special expertise in performance measurement, research, asset allocation and manager research.

Significant developments during the past year include significant research efforts in asset allocation methodology, including forecasting of risk, asset class behavior and new modeling approaches.

There are 40 tax-exempt clients on retainer.

There are 28 client executives. Fees are payable in hard and soft dollars.

Clients include AT&T, Chevron, Xerox and the State of Oregon.

D. Don Ezra is the client contact.

S

Segal Advisors Inc.

1 Park Ave., New York, N.Y. 10016-5895; (212) 251-5340

Segal Advisors Inc., a subsidiary of Martin E. Segal Co., provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate, private placements, futures/options and GIC manager selection, performance measurement and analysis; and venture capital manager selection.

There are 10 professional consultants. Fees are payable in hard dollars.

Alan J. Miller and Martin Levenson are the client contacts.

SEI Corp.

680 E. Swedesford Road, Wayne, Pa. 19087; (215) 254-1000

SEI Corp. provides development of investment policies and objectives and of appropriate asset allocation. Manager selection, performance measurement and analysis are offered for U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC investments.

The firm also offers asset/liability planning, ongoing trading analysis, master trustee evaluation and auditing and special research and development.

The firm provides the following to the investment management industry: domestic and international performance evaluation and consulting; trading cost analysis and consulting; and on-going marketing and business consulting.

The firm has special expertise in handling fiduciary responsibility for providing full pension administration and investment support; real estate consulting; and asset/liability planning.

There are 170 professional consultants. Fees are payable in hard and soft dollars.

Edward D. Loughlin is the client contact.

Jeffrey Slocum & Associates

Suite 310, 7301 Ohms Lane, Minneapolis, Minn. 55439-2336; (612) 893-1955

Jeffrey Slocum & Associates Inc. provides development of investment policies and objectives; asset allocation studies; pension asset/liability modeling; endowment asset/spending formula modeling; investment performance evaluation; investment manager search; U.S., foreign, venture capital, LBO, private placement, futures/options and GIC consulting; and communication programs for defined contribution plan participants.

The firm has special expertise in asset allocation, asset/liability and endowment spending formula modeling, and analysis and evaluation of non-traditional investments.

Significant changes or developments in the past year include the additions of a senior consultant and an analyst, and the opening of a Chicago office.

Of the 49 tax-exempt clients on retainer, 21 are corporate, eight are public, 10 are union and 10 are foundation/endowment. The firm also provided services to 13 non-retainer tax-exempt clients during the past year, of which eight were corporate, two were union and three were foundation/endowment.

There are six professional consultants. Fees are payable in hard and soft dollars.

Clients include Blue Cross/Blue Shield of Minnesota, Great Lakes Protection Fund, Minnesota Teamsters and Super Valu Stores.

Jeffrey C. Slocum and Luke M. Collins are the client contacts.

Smith Barney, Harris Upham & Co. Inc.

1345 Avenue of the Americas, 26th Floor, New York, N.Y. 10105; (212) 698-6920

Smith Barney, Harris Upham & Co. Inc., a subsidiary of Primerica Corp., provides development of investment policies and objectives, and U.S. manager selection, performance measurement and analysis.

The firm offers the Asset Consulting Evaluator service, assisting portfolio managers with investment plans, manager searches and performance monitoring.

The firm has special expertise in servicing the small to midsize pension and profit-sharing plan market, emphasizing plans with assets between $500,000 and $10 million.

The firm has 425 non-retainer tax-exempt clients. The firm also provided services to 2,100 non-retainer, tax-exempt clients during the past year.

Fees are payable in hard and soft dollars.

Ruth J. Harris is the client contact.

Southern Plantations Group

2410 Westgate Blvd., P.O. Box 70967, Albany, Ga. 31707; (912) 439-0012

Southern Plantations Group Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and manager selection, performance measurement and analysis for farmland and timberland investments.

The firm has special expertise in domestic and international agriculture, agribusiness and timberland investments.

There are four professional consultants. Fees are payable in hard dollars.

Joseph H. Marshall is the client contact.

Stockton Capital Management Corp.

7373 N. Scottsdale Road, Suite A-277, Scottsdale, Ariz. 35253; (602) 483-8256

Stockton Capital Management Corp. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign and GIC manager selection, performance measurement and analysis.

The firm has special expertise in structuring investment management programs that use independent investment managers for small to medium-size bank trust departments.

Of the 24 tax-exempt clients on retainer, 21 are corporate, two are public and one is foundation/endowment.

There are three professional consultants. Fees are payable in hard dollars.

Vicki Bielli is the client contact.

Stratford Advisory Group

500 W. Madison St., Suite 2960, Chicago, Ill. 60606; (312) 902-1985

Stratford Advisory Group Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate and private placement manager selection, performance measurement and analysis.

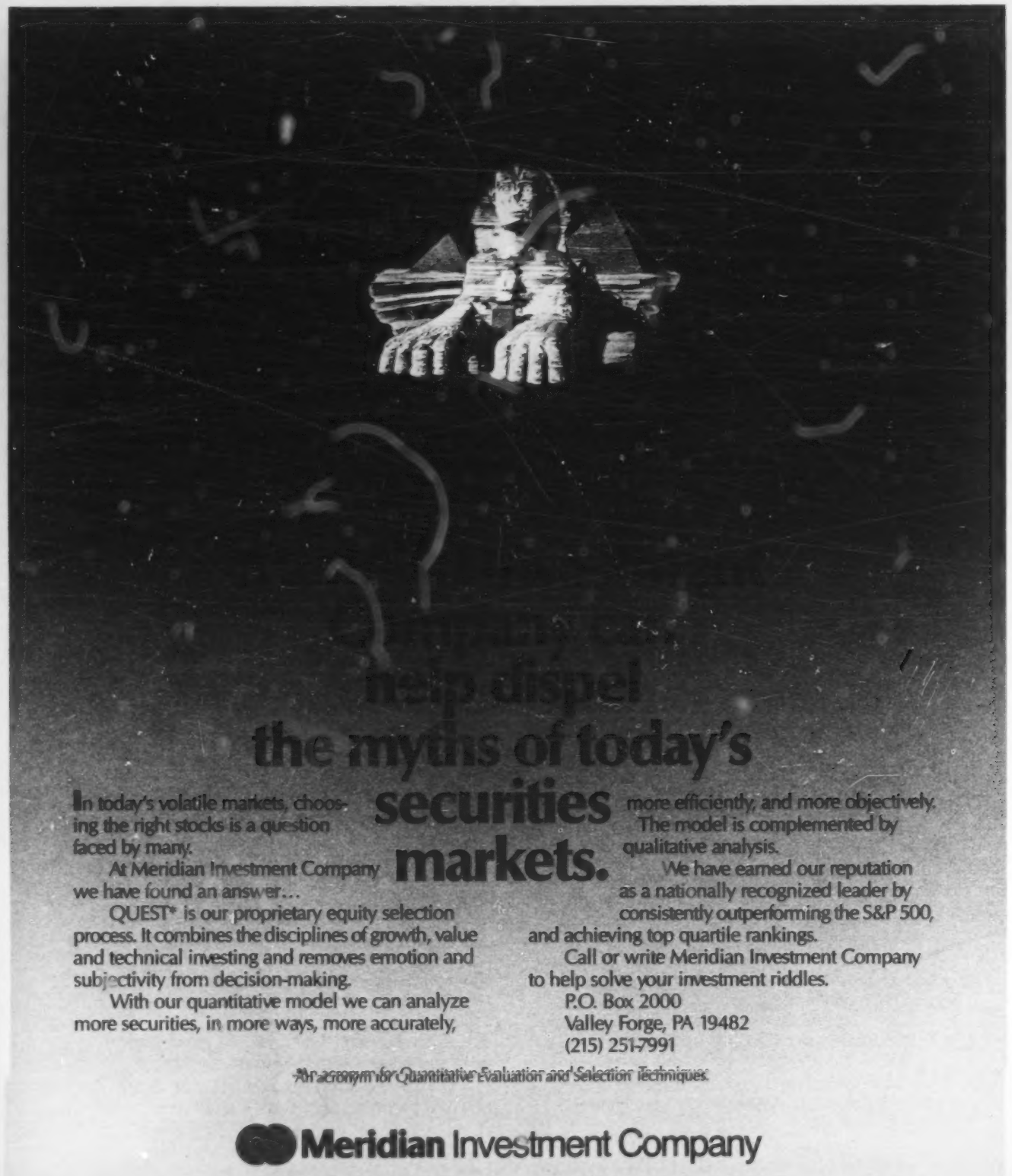
The firm also offers mutual fund management selection and performance analysis.

The firm has special expertise in strategic asset allocation and mutual funds management.

Significant changes or developments at the firm in the past year include staff expansions.

Of the 30 tax-exempt clients on retainer, 12 are corporate, one is public, three are union and 14 are foundation/endowment. The firm also provided services to four non-retainer tax-exempt clients during the past year.

There are seven professional consultants. Fees are payable in hard and soft dollars.



Clients include Knight-Ridder, PSI Energy, Fairchild Industries and the Sheet Metal Workers.
Daniel A. Weiss is the client contact.

T

The Townsend Group
1419 W. Ninth St., Cleveland, Ohio 44113; (216) 781-9090

The Townsend Group provides development of investment policies and objectives, and real estate manager selection, performance measurement and analysis.
The firm also offers property market studies, disposition/workout analysis, independent fiduciary services and strategic planning.
The firm has special expertise in institutional real estate, property-specific and portfolio analysis, real estate research, strategic and investment planning and performance measurement.
Significant changes or developments at the firm in the past year include the creation of a research department, which designs proprietary real estate reporting software and offers a data system that is a joint venture with the Wharton School monitoring real estate advisers and individual institutional real estate transactions.
Of the 13 tax-exempt clients on retainer, three are corporate and 10 are public.
There are eight professional consultants. Fees are payable in hard dollars.
Clients include Southern Service, City & County of San Francisco, the Illinois State Board and the Ohio Police & Firemen.
Kevin W. Lynch and Terrance R. Ahern are the client contacts.

TPF&C
950 E. Paces Ferry Road, Atlanta, Ga. 30326; (404) 365-1745

TPF&C provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements and futures/options manager selection, performance measurement and analysis. Manager selection and additional performance analysis is offered for GIC investments.
The firm has special expertise in asset/liability forecasting, defined contribution asset consulting, GIC consulting and global/international asset consulting.
Significant changes or developments in the past year include the addition of a Swiss office.
There are 45 professional consultants. Fees are payable in hard dollars.
Roger C. Bransford is the client contact.

Transaction Cost Management Inc.
117 10th Ave., San Francisco, Calif. 94118; (415) 668-3726

Transaction Cost Management Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S. manager performance measurement and analysis.
The firm provides advice on establishing portfolio management and trading systems to the investment management industry.
It has special expertise in the establishment of portfolio and trading operations, and measurement and management of transaction costs, primarily for in-house pension fund management.
The firm provided services to two tax-exempt non-retainer clients during the past year, of which one was corporate and one was foundation/endowment.
There are two professional consultants. Fees are payable in hard and soft dollars.
Richard P. Shrieve is the client contact.

Tremont Partners Inc.
39 Pine St., New Canaan, Conn. 06840; (203) 966-4074

Tremont Partners Inc., a subsidiary of Lynch Corp., provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate, private placements and futures/options manager selection; U.S., foreign, private placements and futures/options performance measurement and analysis; and additional performance analysis for LBO investments.
The firm has special expertise in the evaluation of non-traditional managers, such as hedge funds and limited partnerships.
Of the four tax-exempt clients on retainer, three are corporate and one is public. The firm also provided services to 11 tax-exempt non-retainer clients during the past year, of which nine were corporate and two were foundation/endowment.
There are four professional consultants. Fees are payable in hard and soft dollars.
The firm offers several investment vehicles, including Tremont/Stolper International L.P. and Private Asset Management L.P.
Clients include the Town of Fairfield, Conn., ICMA Retirement and McGraw Hill.
Sandra Manzke and Mary Ann Johnson are the client contacts.

Investing in emerging markets will be highlighted in the March 4 issue.

V

Vantage Consulting Group
P.O. Box 1507, Virginia Beach, Va. 23451; (804) 491-2998

Vantage Consulting Group provides development of investment policies and objectives; development of appropriate asset allocation; U.S., real estate, private placements and futures/options manager selection; U.S., private placements and futures/options performance measurement; and additional performance analysis for U.S. and futures/options investments.
The firm has special expertise in developing defensively oriented investment strategies.
Of the three tax-exempt clients on retainer, one is corporate, one is public and one is union.
There are five professional consultants. Fees are payable in hard dollars.
William P. Deuchler is the client contact.

The worst deals of 1990: Jan. 7.

W

Washington Hackett, Smith
147 Carondelet St., Suite 1125, New Orleans, La. 70130; (504) 865-1118

Washington Hackett, Smith & Co. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placement, futures/options and GIC manager selection, performance measurement and analysis.
The firm has special expertise in emerging manager and emerging broker/dealer data bases.
The firm has three public fund clients on retainer. The firm also provided services to six public fund non-retainer clients during the past year.
There are three professional consultants. Fees are payable in hard and soft dollars.
Clients include the City of Seattle, Denver Board of Water Commissioners, Manhattan & Bronx Surface Transit Operating Authority and the State of Louisiana.
Melissa McWilliams-Smith is the client contact.

Wellesley Group Inc.
800 South St., Waltham, Mass. 02154; (617) 891-3636

Wellesley Group Inc. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital and futures/options manager selection, performance measurement and analysis.
The firm provides manager peer group analysis and performance attribution analysis to the investment management industry.
The firm has special expertise in endowment/foundation spending policy development and asset/liability relationships for pension plans.
Of the 40 tax-exempt clients on retainer, 12 are corporate, two are public and 26 are foundation/endowment.
There are six professional consultants. Fees are payable in hard and soft dollars.
Clients include Chicago Transit Authority, Washington Suburban Sanitary Commission, University of Missouri and E.R. Carpenter.
Andrew D. Parrillo and Pamela A. Joachimi are the client contacts.

Wilshire Associates Inc.
1299 Ocean Ave., Suite 700, Santa Monica, Calif. 90401; (213) 451-3051

Wilshire Associates Inc. provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate, private placements and futures/options manager selection and performance measurement; additional analysis is provided for all categories except futures and options. Venture capital and LBO performance measurement also is offered.
The firm has special expertise in asset allocation, international performance measurement, and GIC and real estate consulting and manager selection.
Significant changes or developments in the past year include a change from partnership to corporation status, new real estate consultants and an increase in consulting and support staff.
Of the 69 tax-exempt clients on retainer, 37 are corporate, 22 are public and 10 are foundation/endowment.
Fees are payable in hard and soft dollars.
Clients include California Public Employees, Oregon Public Employes, the PBGC and Texaco.
Stephen L. Nesbitt is the client contact.

Wurts, Johnson & Co.
1111 Third Ave., Suite 1200, Seattle, Wash. 98101; (206) 622-3700

Wurts, Johnson & Co. provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real es-

In 1981, MetLife acquired the Midland Mall, a 500,000-square-foot shopping center in Warwick, Rhode Island for our Tower Fund, an open-ended equity real estate account. It was a good investment, a sound property in a steady market with excellent demographics.

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For more information about Tower Fund, call Michael J. Walker, Assistant Vice-President, Pensions-Real Estate, Metropolitan Life Insurance Company, One Madison Avenue, New York, N.Y. 10010, (212) 578-3343.

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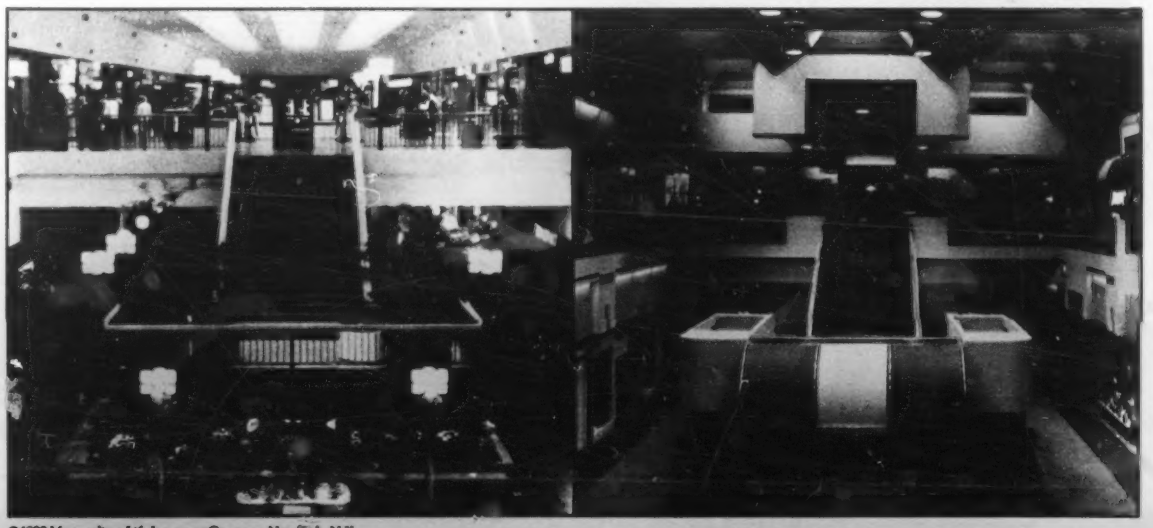

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Fright

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the demand for such work may have a general increase next year; fund sponsors may be treating this year's economic developments as a "fait accompli."

Funds that are having studies done now report a variety of reasons for their actions, and the reasons not necessarily tied to the economy.

The $201 million Richmond (Va.) Supplemental Retirement System is reviewing its investment strategy because several manager contracts are expiring next year and because the fund hasn't been greatly diversified to date, said Clara Lee, executive director. The fund is now divided among actively managed equities, actively managed bonds and dedicated bonds, but may need to diversify further, she said. The review, being done by Fiduciary Capital Advisors, Westfield, N.J., likely will be completed by the first of the year.

The $380 million Public Service Co. of Colorado pension fund, Denver, is having Hewitt's Santa Ana, Calif., office do an asset allocation study because the utility has a new pension committee, said Virginia Clarke, trust asset management director. Previous committees handled most of the work in-house, but the new committee felt more comfortable using an outside firm, Ms. Clarke said.

In studies that are going on, consultants said international/global investing and real estate are the areas getting the most scrutiny. Fund officers still are interested in international equities despite the asset category's relatively poor performance, while they are questioning the long-term prospects for real estate, Mr. Jones said.

Mr. Ezra added investors are finding more buying opportunities in international stocks now that Japanese equities are less overvalued. "With the Japanese market coming down, there is a silver lining," he said. Also, some clients are seeing troubles in the real estate market as opportunities, he said.

Mr. Schneider added international bonds have produced strong returns, piquing fund sponsors' interest.

The consultants also reported they aren't seeing any wholesale move to active equity management from indexing. "When we get the litmus test of a negative market, we don't see active managers doing any better," Mr. Nesbitt said, commenting on the conventional wisdom that while active managers may lag indexers in bull markets, they will outperform in bearish ones.

Indeed, in the third quarter, the median equity manager in the PIPER+ universe of *Pensions & Investments* had a drop of 15.3%, while the Standard & Poor's 500 Stock Index declined 13.9%.

There might be a move to more specialized index funds, but no big move away from indexing, Mr. Schneider added. ■

The best and worst deals of 1990 will be highlighted in the Jan. 7 issue of *Pensions & Investments*.

Callan

Continued from page 41

clients with $225 billion in assets — Callan should get reaction from many pension funds. While Callan's 31 consultants reiterate the pitfalls of each market and tell clients to expect negative numbers during down cycles, he said, they still express shock when down cycles actually happen.

Callan consultants, however, aren't recommending a shift to cash or other macroeconomic action to deal with a recession.

The firm's recommendation is to "stick with the strategic plan" and buy if the prices in a particular asset class fall so far as to push them below their strategic allocation to that asset class. Yet, "nobody likes a sale" and its difficult to get investors to buy in a down market, Mr. Peyton said.

Callan also recommends holding a steady course in global portfolios even with the threat of war in the Persian Gulf and Saddam Hussein's threat to destroy oil fields in Saudi Arabia.

Even if there are momentary shocks to the world's financial markets, Mr. Peyton said Callan feels there is a low probability of any substantial damage. If a war breaks out and is over quickly, the price of oil will "drop like a rock," he predicted.

What happens in the Persian Gulf or in London or Tokyo financial districts has become an increasing concern of Callan clients.

In the first 10 months of 1990, Callan's clients put more money into international markets, $3.8 billion, than they did from 1985 to 1989, $2.8 billion.

As one of the largest consultants in the nation, Callan's advice is heeded in pension board rooms across the nation. The financial world has grown in complexity, and Callan added eight consultants in 1989 to help trustees avoid financial pitfalls.

In addition, Callan has added real estate and international divisions. It has a professional staff of 100 people and a total staff of 150.

While some pension officers are complaining about the poor returns they are suffering in real estate — most real estate returned about 7% from 1985 to 1989 — Mr. Peyton said consultants shouldn't be blamed. Consultants warned pension trustees real estate moves in cycles and there are pitfalls in real estate investments.

Callan wouldn't recommend pulling out of the real estate asset class because that would be market timing, said Mr. Peyton.

However, Callan has recommended replacing real estate investment managers who underperform for their investment style.

To avoid sagging investment returns, some major corporate plans have included tactical asset allocation or short-term moves of assets in their decision-making. But Callan doesn't support the tactical asset allocation concept. Mr. Peyton said Callan has "not seen any evidence over the long run" that it works.

Many pension funds also are shifting billions of dollars into equity index funds. But Callan takes a more traditional view and doesn't recommend wholesale adoption of the method even though some pension officers contend most active investment advisers can't beat the indexes.

He agrees that for the past five years, the S&P 500 would have placed an investor in the top quartile of investment performance. But for the past 10 years the performance would be only median, and for 15 years the S&P index's performance is in the third quartile in Callan's performance universe, he added.

He predicted indexing assets will lose popularity when active managers again repeatedly beat the indexes, and that could happen in a down market, he said.

Mr. Peyton finds fault with consultants who manage money as well as consult to pension funds. Consultants with money management units show a "perceived bias" and mistakenly "telegraph" the identity of managers clients think the consultant prefers.

In reality, the manager chosen by the consultant to run money might be wrong for some of its clients. The proper selection should be based on the needs and objectives, such as particular risk level, for the client.

Mr. Peyton defends consultant practices of selling products to the same money managers whom they might recommend to clients. He doesn't see it as a conflict of interest. Money managers need as much help and advice as pension clients, he noted.

Mr. Peyton said many consultants aren't being paid enough money. To critically assess a money manager's appropriateness for a client requires extensive back office support, which squeezes consulting profits.

A manager search might bring a consultant $20,000 in fees. While pension clients might complain about the consulting fee, the selection is for a manager who might be paid $2 million in fees each year, Mr. Peyton said.

Many fees to consultants are paid in soft dollars. Some federal officials think the method of soft dollar payments will eventually be eliminated. But Mr. Peyton believes that won't happen until brokerage services become unprofitable. ■

Groups

Continued from page 41

rangements toward a fee-based system, and credits IMCA with furthering that effort. "Right now, there is more than a simple majority of broker-consultants that are already fee based," he said.

Mr. Bott said he regrets the acrimony surrounding the split in 1985 but believes the two groups can coexist and serve distinct markets.

"They have a lot of money managers participating in their organization," Mr. Bott said, one of the principal reasons behind the split. "They have zeroed in on the upper tier of the consulting community. We identify, train and certify the middle market and the smaller consulting firm clientele. Our target is primarily people who are part of major regional brokerage firms and independent consulting firms with three to five professional staff members."

The IIMC has certified 65 consultants through its program so far. The IIMC designation is the Certified Investment Management Consultant. The IIMC education program is a home-study effort "similar to the Certified Financial Analyst program," Mr. Bott said, and "is the only course of its type which takes someone who is in the consulting field who wants academic training in the area."

But the professional efforts of both groups do not have the unanimous support of the consulting industry.

One independent consultant said the programs "lack legitimacy" because most of the membership is made up of broker-related consultants.

"They are providing a worthy service and are looking for collective legitimacy by bringing more legitimacy to brokerage consulting. I really don't think much of this group (IMCA), but I know it is growing. At the end of the day they are still brokers and transaction-oriented," he said. ■

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tate, venture capital, private placements, futures/options and GIC manager selection and performance measurement; and additional performance analysis for U.S., foreign, real estate, venture capital and GIC investments.

The firm has special expertise in asset/liability work and 401(k) investment option analysis.

Significant changes or developments at the firm in the past year include the establishment of a Los Angeles office, and the addition of Dale Stevens.

Of the 83 tax-exempt clients on retainer, 54 are corporate, four are public, 12 are union and 13 are foundation/endowment. The firm also provided services to nine tax-exempt non-retainer clients during the past year, of which five were corporate, one was public, one was union and two were foundation/endowment.

There are five professional consultants. Fees are payable in hard and soft dollars.

Clients include Nordstrom, Alaska Airlines, Anchorage Police & Fire and California Bankers Association.

The client contacts are Brian Cathcart in Seattle and Adele Berwanger in Los Angeles.

Wyatt Asset Services Inc.
303 W. Madison St., Chicago, Ill. 60606; (312) 704-0600

Wyatt Asset Services Inc., a subsidiary of The Wyatt Co., provides development of investment policies and objectives; development of appropriate asset allocation; U.S., foreign, real estate, venture capital, LBO, private placement, futures/options and GIC manager selection; U.S., foreign and GIC investment performance measurement; and additional performance analysis is available for U.S. and GIC managers.

The firm also offers asset/liability modeling.

The firm has special expertise in asset/liability analysis, manager selection and GIC consulting.

Significant changes or developments at the firm in the past year include development of a global investment consulting service and a PC version of the asset/liability model.

Of the 65 tax-exempt clients on retainer, 43 are corporate, three are public, 17 are union and two are foundation/endowment. The firm also provided services to 75 non-retainer tax-exempt clients during the past year, of which 53 were corporate, two were public, 16 were union and four were foundation/endowment.

There are 18 professional consultants. Fees are payable in hard dollars.

Philip Schneider is the client contact.

Yanni-Bilkey Investment Consulting Co.
2500 Grant Building, Pittsburgh, Pa. 15219; (412) 232-1000

Yanni-Bilkey Investment Consulting Co. provides development of investment policies and objectives; development of appropriate asset allocation; and U.S., foreign, real estate, venture capital, LBO, private placements, futures/options and GIC manager selection. Performance measurement and analysis is offered for U.S., foreign, real estate, futures/options and GIC managers; additional performance analysis also is offered for private placements.

The firm offers proprietery software that permits a detailed analysis of how results were achieved.

The firm provides the GRID and CASH statistical data base services to the investment management industry.

The firm has special expertise in servicing hospitals, its data base of cash-managed portfolios and GIC evaluation and mutual fund statistics.

Significant changes or developments at the firm in the past year include the incorporation of Yanni-Bilkey Asset Planning and Yanni-Bilkey GIC Corp.

Of the 95 long-term, non-retainer clients, 65 are corporate, eight are public, six are union, 10 are foundation/endowment and six are in other categories. The firm also provided services to 12 tax-exempt non-retainer clients during the past year, of which seven were corporate, two were public, two were union and one was "other."

There are nine professional consultants. Fees are payable in hard and soft dollars.

Clients include the City of Pittsburgh, UniHealth America, Duquesne Light, Coopers and Lybrand and Wisconsin Power & Light.

James E. Yanni and Terry Bilkey are the client contacts.

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November 26, 1990

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AT DEADLINE

LeBon leaving Wilshire

Doug LeBon, vice president of the special investment group at Wilshire Associates, is leaving. Sources said he and at least one other Wilshire consultant will be associated with former Treasury Secretary William E. Simon in the venture capital field.

Freeman quits First Boston

James Freeman — former chairman and chief executive officer with First Boston Asset Management Corp. — resigned Nov. 14. Mr. Freeman oversaw First Boston Asset; CSFB Investment Management Group; CS Global Fund Managers; and a new group in Australia.

Panel revises target dates

The U.S. Working Committee of the Group of Thirty urged 1993 as the new date for the country's implementation of proposals on clearance and settlement of securities transactions.

The recommendations — to reduce the period for settling trades to three business days and to effect settlements only by electronic book entry — had effective dates of 1992 and 1995.

NYC fund taps PanAgora

The Teachers Retirement System, part of the $18 billion New York City Retirement System, hired PanAgora Asset Management to manage $340 million in its South Africa-Free Asset Allocation Fund.

Record keeper picked

John Hancock Mutual Life Insurance Co.'s $1.3 billion group pension separate account portfolio chose Investors Bank & Trust Co., Boston, to perform custody, fund accounting and portfolio valuation.

INSIDE

Illustration by Douglas Klauba

The decision that hurts

Many sponsors' decisions to exclude cash from an active equity manager's benchmark hinders the bogey's effectiveness in determining manager skill and controlling aggregate portfolio risk. See Commentary, page 14.

Firms overhaul retiree health plans

FASB prompts program checkups

By Hillary Durgin

WASHINGTON — Companies such as Procter & Gamble Co., Ball Corp., FMR Corp. and The Vons Cos. Inc. are revamping their retiree medical programs, in part as a way to anticipate the FASB's new accounting rules, but also to place a limit on their potential liability.

"The whole FASB thing is just requiring employers to take the temperature," said Lance Tane, partner at Kwasha Lipton, Fort Lee, N.J. "Whether or not you take the temperature, the pot is boiling over. The liability is there."

Within the next two weeks, the Financial Accounting Standards Board, Stamford, Conn., is expected to sign off on a landmark regulation that could transform corporate balance sheets into potential mine fields.

The new accounting rule, which would force employers to recognize the cost of providing future retiree medical benefits on their income statements, comes at a particularly difficult time, as many corporations' earnings already are on the skids. Now, more than ever, companies are reluctant to plunk a liability on their bottom line.

As corporations examine how to put a lid on liabilities that could wipe out earnings, many are discovering they must re-evaluate and, in some cases, define for the first time the philosophy underpinning their total retirement package.

Under the new rule expected to take effect in 1993, companies will have to expense the amount of retiree medical benefits that employees earn each year. In addition, companies must amortize the cost of benefits already earned when the rule goes into effect.

One key change from the FASB initial draft of the regulation will permit employers to take into account future plan changes when measuring their promise, said Murray Akresh, director in the actuarial and benefits group at Coopers & Lybrand, New York. Previously, the draft only allowed employers to account for the written terms of the plan.

"This is probably the biggest change in the exposure draft that the FASB is making," Mr. Akresh said.

Employers can anticipate future changes — which would include any adjustments in retiree contribution levels or employee deductibles — provided they can demonstrate a consistent approach toward their cost-sharing policy, Mr. Akresh said.

As employers scrutinize their benefit promises and figure out what they owe, many companies are finding their retiree benefits are rich. Not only do some companies provide the same, high-price benefits to short-service workers as to career employees, but also, in some cases, employers have found their post-retirement medical plans favor their retired over active workers, consultants said.

See **FASB** *on page 36*

Realty debt now equity for lenders

By Terry Williams

Pension fund investors in the Pension Realty Income Trust A, a closed-end commingled fund, started out as lenders but ended up as property owners when eight of the 11 participating mortgages it wrote had to be foreclosed on.

The fund is being liquidated and the investment objective — a 4% real rate of return when the fund was conceived — has been lowered to 1%, according to Dale Gruen, vice president and asset manager with Piedmont Realty Advisors, San Francisco. Piedmont is asset manager for the fund.

A majority of the portfolio properties are in the Southwest — Texas and Oklahoma — and 60% are suburban office buildings, according to Piedmont officials.

The foreclosures reflect the real estate problems that occurred in the Southwest in the mid-1980s. The fund's ability to liquidate will be hampered by the lack of demand for suburban office space in that part of the country.

Investors in the trust include the pension funds of the Chicago Transit Authority, Chicago; Duke Power Co., Charlotte, N.C.; E-Systems Inc., Dallas; Houston Industries Inc., Houston; Potomac Electric Power Co., Washington; and Savannah Food and Industries Inc., Savannah, Ga.

The price per unit trust was $500,000, and the group trust had a $37.5 million capitalization, said Mr. Gruen.

The $945 million Chicago Transit Authority fund was the largest investor with $15 million, or 40%

See **Realty** *on page 38*

Photo courtesy of Mexican Ministry of Tourism

The peacefulness of Las Hadas, Mexico, belies the excitement investors feel about the Mexican market.

Mexico's allure mounts

Chance for pension reform draws investors' attention

By Margaret Price

The possibility that Mexico will start a mandatory pension system as early as next year is making the Mexican stock market, already attractive to some institutions, more alluring.

A number of U.S.-based institutional investors, among them GE Investments, Capital Research International and Intervest Corp., have raised their exposures to the Mexican market. A few others, such as BEA Associates Inc., maintain relatively sizable weightings in Mexico. The United Nations Joint Staff Pension Fund has been investing in the Mexican market since the early 1980s, and now has about $25 million invested, or 0.3% of its assets.

Impressive economic improvements in Mexico, coupled with the November 1989 liberalization of investing rules for foreigners, have spurred interest. But even more attractions may lie ahead: If Mexico does establish new pension funds — and government announcements on the issue are expected early next year — the development will further fuel the stock and bond markets, experts say. One key reason is that Mexico's pension funds may only invest domestically.

The government is now studying the possibility of establishing a pension system based at least partly on one set up about five years ago in Chile. In Chile, employees put a certain amount of earnings into funds managed by outside money managers of their choosing.

See **Mexico** *on page 34*

NEWS DIGEST

Why is Dan O'Sullivan smiling? The president and CEO of ULLICO is reaping the rewards of new business thanks to the creation of a separate account subsidiary and the expertise of Cashman, Farrell and Associates. See page 30.

Philadelphia's retirement system could play a role in the city's financial recovery by purchasing a portion of a non-investment-grade bond issue. Page 4.

Georgia-Pacific is seeking Labor Department approval to buy $5.3 million of GICs from its defined contribution plans. Page 6.

SPECIAL REPORT: PIPER

Fixed-income commingled funds top equity pools and provide investors with a haven during turbulent economic times. Page 17.

Median real estate returns are flat and the indications are that 1990 may be among the worst years for performance of property investments. Page 17.

FINANCING

The need for capital in many European markets has drawn the interest of U.S. insurance companies and financial service firms. Page 2.

A weakening economic picture is forcing corporations to conserve cash and redeem debt. Page 28.

INTERNATIONAL

The Mexican stock market, already alluring to many institutional investors, may get a further boost from the country's government. Page 1.

U.S. endowments and foundations have targeted as much as 20% of assets for foreign investing. Page 3.

REAL ESTATE

Pension fund investors in the Pension Realty Income Trust A closed-end fund started as lenders but now are owners. Page 1.

First National Bank of Chicago has filed suit against the Office of the Comptroller of the Currency, the fourth suit involving the bank's Fund F. Page 26.

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Scoreboard questionnaires out

Work has begun on *Pensions & Investments'* annual Money Manager Scoreboard. Questionnaires have been mailed and must be returned by Dec. 31 to be included in the rankings. If your investment management firm has not yet received a questionnaire, or if you have questions on it, contact Christine Philip, directory coordinator, at (312) 649-5217.

Steel termination looms

CF&I in Chapter 11; plan underfunded by $140 million

By Trudy Ring

PUEBLO, Colo. — CF&I Steel Corp. plans to seek termination of a pension plan underfunded by $140 million, a move that may not meet with approval from the Pension Benefit Guaranty Corp.

CF&I filed a petition Nov. 7 for reorganization under Chapter 11 of the Federal Bankruptcy Code, citing its unfunded pension liability and continued weak markets for its products, which include railroad rails and seamless pipe for oil and gas.

The filing suspends all payments to the pension plan, which has assets of about $50 million and liabilities of $190 million. CF&I officials said the company had made all required contributions to the plan on time and in full except for a special payment of $12.3 million due in September 1990 and a quarterly payment of $1.8 million due in October 1990.

In 1982 and 1983, the company cut its operations significantly, reducing its work force to about 2,000 from 6,000, a spokesman said. He didn't have a figure on how many workers joined the retiree rolls, but said the company did have a dramatic increase in the number of retirees.

If the company terminates the plan, it would be the fourth largest underfunded termination to come to the PBGC, a spokeswoman for the pension insurance agency said. The largest was Wheeling-Pittsburgh Steel Corp., underfunded by $500 million, followed by Kaiser Steel Corp., $220 million, and Allis-Chalmers Corp., $175 million.

(The PBGC had involuntarily terminated three LTV Corp. plans, with about $2 billion in unfunded liabilities, but those plans have been restored to the company.)

The PBGC has been monitoring CF&I's situation and talking to company officials about their responsibilities for the unfunded liabilities, the spokeswoman said. Although the company began talking with the PBGC in 1987, it has not shown that a termination is warranted and has not taken any steps to improve its situation, she said.

The company spokesman declined to respond to the PBGC's comments.

The company has not yet applied to the PBGC for termination, the spokeswoman added. Besides the PBGC, CF&I must have approval from the United Steelworkers of America, which represents many of its employees, to terminate the plan.

Epie Martinez, financial secretary of Steelworkers Local 2102, Pueblo, which represents 1,500 CF&I workers, declined comment on the union's position. ■

HUD Secretary Jack Kemp wants to tap pension fund assets to help provide Americans with affordable housing alternatives.

Ease ERISA rules for housing: Kemp

By Joel Chernoff

WASHINGTON — Housing and Urban Development Secretary Jack Kemp has asked Labor Secretary Elizabeth H. Dole to permit private pension funds to accept a below-market rate of return on investments in mortgage-backed securities.

In a Nov. 5 letter, Mr. Kemp, a strong advocate of affordable housing, embraced a proposal by the New York City Housing Partnership that would enable local pension funds to provide $100 million in below-market financing for low- and moderate-income families.

"What really strikes me, however, is the implications of such an effort nationwide," Mr. Kemp wrote. "With an estimated $2 trillion in pension funds, access even to a relatively small portion of this amount for use in securing residential mortgages in combination with other means of lowering final housing costs to prospective homeowners would result in a dramatic increase in the affordability of housing for families."

Mr. Kemp's request, which would involve changing rules affecting loans to plan participants, probably will remain dormant until a new labor secretary is named by President Bush. Ms. Dole left the Labor Department Nov. 23 to become president of

See **Housing push** *on page 39*

U.S. offers new capital for Europe

By Marcia Parker

LONDON — A handful of U.S. insurance companies and other U.S. financial service firms are quietly setting up shop or expanding operations in Europe to provide alternative capital sources.

The players include affiliates of General Electric Co., Westinghouse Corp., Equitable Life Assurance Society of the United States and Prudential Life Insurance Co. of America.

They are getting a toehold in Europe at a time when the need for capital to propel growth is substantial. Many European companies are diversifying capital sources and consider the private U.S. capital as a viable long-term alternative.

In addition, two of them, Equitable and Prudential, plan to expand into international money management in the future.

These operations do not yet contribute heavily to the bottom line of the U.S. parent, but analysts say they appear to be profitable and are expected to do well in the years ahead. The parent companies don't break out financial data for these businesses, making it hard to assess exactly how they are doing.

"The European operation is a small portion of their business. But it's where the growth is," said Richard Schmidt, vice president, Standard & Poor's Corp., New York. "They are starting small and sizing up the market."

Searching for opportunities to boost returns, the U.S. institutions are diversifying globally with the world's capital markets. Even though the worldwide economic slowdown is hampering them and their competitors to some extent, they say they are making headway.

GE Capital Europe, Westinghouse International Capital Ltd., P.I.C. Europe and E.C. Capital

See **European offices** *on page 38*

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Equity ■ Balanced ■ Fixed Portfolios

Philadelphia fund may aid city bailout

By Terry Williams and Trudy Ring

The City of Philadelphia Municipal Pension Fund will purchase non-investment-grade securities issued by the city as part of Philadelphia's $250 million financial recovery plan — if an outside attorney determines it is a prudent investment.

The City Council last week passed by a 10-7 vote an ordinance permitting the pension fund to invest in non-investment-grade securities.

Meanwhile, in Illinois, the state Senate has approved an amended bill that allows the Chicago Board of Education to divert pension property tax levies to cover teachers' raises. The amended version is without provisions, contained in the original legislation, that would have the state take over funding of Chicago teachers' pensions and improve early retirement benefits for both Chicago and downstate teachers.

The state House of Representatives is expected to vote on the legislation the last week in November.

The Philadelphia pension fund hired fiduciary legal expert Ian Lanoff of the Washington law firm of Bredhoff & Kaiser for the due diligence, according to Tina Poitevien, chief investment officer of the $1.6 billion fund.

Mr. Lanoff's opinion is due in the next few weeks, said David Volpe, a spokesman for City Comptroller Jonathan Saidel.

Several figures have floated around about what portion of the offering the pension fund will buy, with $62.5 million the most often quoted figure, according to Ms. Poitevien.

"To the extent that this would be a prudent investment, the amount would be determined by the due diligence," she said.

Philadelphia Mayor W. Wilson Goode announced in September the city would be broke by Dec. 1 after an attempt to sell $375 million of short-term notes failed.

In Illinois, legislation allowing the Chicago property tax diversion and also raising early retirement benefits and giving the state responsibility for funding of the Public School Teachers' Pension and Retirement Fund of Chicago had been approved several months ago. However, Gov. James Thompson, through his amendatory veto power, removed the early retirement and state funding provisions of the bill and sent it back to the Legislature.

The major objections to those provisions were the cost, estimated at $129 million a year, and the state's assumption of $1.4 billion in unfunded liabilities for the Chicago teachers' pension system, said James J. Ofcarcik, manager of long-term debt analysis for the Illinois Economic and Fiscal Commission. ■

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CORRECTIONS & CLARIFICATIONS

- **MIG Cos.** was identified incorrectly in the story in the *Pension Funds and Shopping Centers* supplement in the Nov. 12 issue.
- The drop in master trust and master custodial assets for **Bank of New York** reported in the Oct. 1 story was incorrect. The bank experienced a 1.6% drop in those assets. Also, the client contacts were misidentified: William Barron handles master custodial inquiries and Curtis Yamaoka and Janet Zaloom handle global custody.
- The amount of total discretionary tax-exempt assets listed for **The Equitable** in the chart listing the largest insurers in the May 21 issue was incorrect. Equitable had $77.68 billion at year-end 1989.

PIPER fixed-income funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	2.47%	10.52%	12.64%	12.89%	15.53%
First quartile	1.84	8.40	10.43	10.20	12.47
Median	1.18	7.41	9.65	9.55	11.76
Third quartile	0.62	6.33	9.11	8.89	11.35
Lowest return	-10.92	-9.45	2.34	4.50	9.34
SLB G/C	**0.60**	**6.75**	**10.25**	**10.00**	**12.41**

PIPER equity funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	-2.15%	8.30%	9.61%	21.02%	22.86%
First quartile	-11.42	-5.41	3.39	14.87	14.94
Median	-13.66	-9.29	1.96	13.38	13.64
Third quartile	-15.56	-13.30	0.28	11.61	12.20
Lowest return	-25.46	-32.31	-8.16	1.85	7.12
S&P 500	**-13.86**	**-9.35**	**1.80**	**14.80**	**13.98**

PIPER special equity funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	-3.00%	1.48%	11.02%	25.97%	17.12%
First quartile	-17.74	-13.00	2.40	13.53	13.64
Median	-20.18	-18.81	-1.60	9.44	11.49
Third quartile	-23.36	-23.44	-4.44	7.17	9.85
Lowest return	-29.47	-38.57	-15.24	1.85	4.86
S&P 500	**-13.86**	**-9.35**	**1.80**	**14.80**	**13.98**
Russell 2000	**-24.54**	**-27.15**	**-7.58**	**4.50**	**8.75**

A haven from the storm

Fixed income weathers turbulent economic climate

By Fred Williams

Amid signs of a weakening economy, the declining dollar and recessionary fears, fixed-income funds fared better than equity funds for the year ended Sept. 30, according to Pensions & Investments' Performance Evaluation Report.

Median fixed-income funds in the PIPER and PIPER+ universes outperformed median equity funds in the third quarter and for the 12-month period. Median equity returns for both periods had negative returns as the stock market continued its downward spiral after peaking in July.

The median PIPER fixed-income return was 1.18% for the third quarter and 7.41% for the year. Similarly, the median PIPER+ fixed-income manager returned 1% and 7.1%, respectively.

The Shearson Lehman Brothers Government/Corporate Bond Index returned 0.6% for the third quarter and 6.75% for the 12 months.

By contrast, the median PIPER equity manager returned -13.66% for the quarter and -9.29% for the year. The median PIPER+ equity return was -15.32% and -11.53% for the same periods. The Standard & Poor's 500 Stock Index returned -13.86% and -9.35% respectively.

The PIPER universe represents the commingled funds of banks and insurance companies; the PIPER+ universe represents the accounts of independent advisers. Both universes are compiled by Rogers, Casey & Associates, Darien, Conn. All returns for periods of more than one year are compound annualized.

The PIPER fixed-income funds reflected the uncertainty in the financial markets and the flight to quality as the top performing funds tended to focus on higher quality instruments and shorter maturities.

Shearson Trust Co., Wilmington, Del., had two bond funds in the top decile of the PIPER fixed-income universe for the quarter, including the top fund — Income Fund No. 1 at 2.47% — and Income Fund No. 2 with 2.23%.

Shearson Trust was followed by First National Bank of Maryland, Baltimore, with a return of 2.46%, and the F1 Reserve Fund of Chancellor Capital Management, New York, with 2.41%.

General American Life Insurance Co., St. Louis, finished the quarter in fourth with a return of 2.4% on its separate account No. 6, and placed in the top five for the one-, three- and five-year periods.

The American General fund consists primarily of commercial mortgage loans, generated by the company's own network of offices around the nation.

Tom Brackett, pension marketing director, said the $83 million fund contains mortgages of five- to 10-year of fixed and variable rates in 11 states. He said the average loan is $600,000 to $700,000 involving multiuse properties such as shopping centers, offices, warehouses and light industrial uses. The portfolio has an average duration of 4.7 years and the average life of the loan is about 7 years.

"We don't loan more than 75% of the assessed valuation on the property," he said. The average is about 67%. "The theory behind

See **Stormy** *on page 23*

Outlook is bleak for pooled real estate fund returns

By Steve Hemmerick

Median investment returns for pooled institutional real estate funds are already flat in 1990, and the latest numbers indicate this year might be one of the worst for real estate performance.

Pensions & Investments' Performance Evaluation Report shows the median open-end real estate fund returned only 1.24% for the second quarter of 1990; for the first half of the year the median return was 2.46%. For closed-end funds, the median fund returned 1.6% for the quarter and 3.2% for the first six months.

If the performance trend for real estate commingled funds continues as expected, the median open-end real estate return could be a little above 5% for calendar year 1990, consultants predict.

The consultants add the United States appears to be moving into a recession, which could further dampen property returns.

The economic slowdown already is punishing some real estate, according to Paul Saint-Pierre, president of the San Francisco-based real estate consulting firm Pension Realty Advisors.

A 5% to 5.5% return for calendar year 1990 would be up to 360 basis points less than the median return of 8.6% for open-end funds in 1989. The lowest calendar year median return for open-end funds during the 1980s was 7.6% in 1987.

Some real estate consultants think closed-end funds could score a median return of 5% to 6% for calendar year 1990, below the median 7.4% for 1989 and the median 7.1% for 1987, the low for the 1980s.

While there are exceptions for individual pooled funds, neither of the top performing funds for the second quarter of 1990 are typical of the core real estate pension executives hold.

The top open-end fund for the second quarter was the Union Mortgage Account of Prudential Realty Group, Newark, N.J., with 3.5%. But the $138 million fund holds no equity real estate and invests only in straight mortgages.

The ForesTree I fund of John Hancock Timber Resource Group, Boston, had the best return in the second quarter for closed-end funds at 11.9%. But the fund is small — $17 million — and invests solely in timberland, which most pension trustees call a niche investment.

The two largest commingled funds for institutional investors — Equitable Real Estate Investment Management Inc.'s $3.7 billion Prime Property Fund and Prudential Realty Group's $3.5 billion PRISA fund — both returned 1.8% for the second quarter, finishing in the top third.

In the first half of 1990, four open- and four closed-end funds reported negative performance, the lowest returning -7.47%.

Nori Gerardo, a consultant with Pension Consulting Alliance, Glendale, Calif., said she does not see a "significant differential" between open- and closed-end fund returns.

Because of the weakening economy, landlords generally are not going to see increases in rent, said Mr. Saint-Pierre. With many businesses trying to cut costs, rent, which is negotiable, is one of the places to be targeted, he said. Without growth in rents, there is little likelihood for any significant appreciation in real estate.

With little or no appreciation, the only return investors receive from property investments will come through income.

Thousands of employees are being laid off from their jobs, which particularly hurts the office sector, he said. Other real estate segments, especially retail properties, also could suffer from the likely drop in consumer spending.

See **Real estate** *on page 24*

PIPER+ fixed-income funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	3.35%	11.02%	13.45%	15.31%	16.02%
First quartile	1.70	6.12	10.54	10.78	13.35
Median	1.00	7.10	9.83	10.23	12.65
Third quartile	0.40	5.80	8.94	9.40	11.99
Lowest return	-7.50	-3.77	5.93	7.61	10.01
SLB G/C	**0.60**	**6.75**	**10.25**	**10.00**	**12.41**

PIPER+ equity funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	0.12%	20.60%	39.67%	25.96%	24.98%
First quartile	-12.42	-6.74	4.00	15.67	16.83
Median	-15.32	-11.53	2.08	13.96	14.80
Third quartile	-18.15	-16.14	-0.40	11.65	13.27
Lowest return	-33.91	-33.32	-10.52	3.18	6.56
S&P 500	**-13.86**	**-9.35**	**1.80**	**14.81**	**13.98**

PIPER+ special equity funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	32.56%	103.98%	52.12%	41.28%	18.68%
First quartile	-5.98	-5.78	-5.50	12.85	12.85
Median	-10.60	-8.52	3.76	8.54	11.75
Third quartile	-13.63	-12.46	0.22	7.26	11.22
Lowest return	-27.20	-25.68	-9.65	3.96	10.27
S&P 500	**-13.86**	**-9.35**	**1.80**	**14.81**	**13.98**
Russell 2000	**-24.54**	**-27.15**	**-7.58**	**4.50**	**8.75**

PIPER+ global funds
(periods ended Sept. 30)

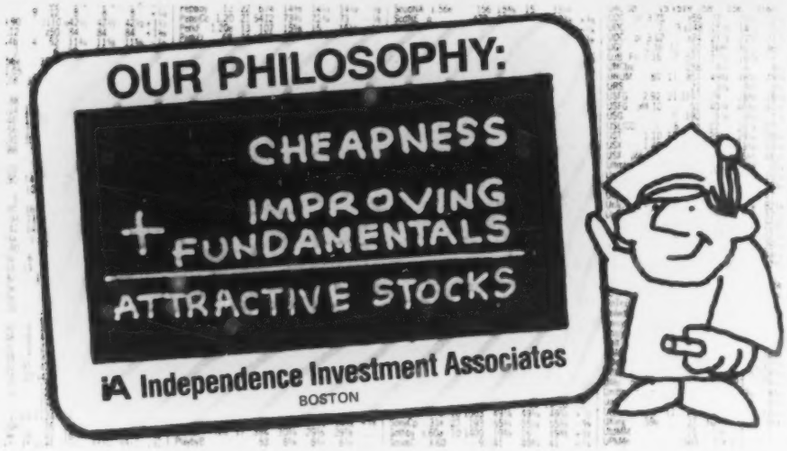
	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	-13.40%	-1.43%	9.98%	26.08%	21.26%
First quartile	-16.12	-8.92	1.46	19.53	17.01
Median	-17.27	-12.11	-0.65	16.90	15.75
Third quartile	-18.76	-15.42	-2.44	15.88	14.38
Lowest return	-23.49	-27.64	-6.18	10.79	14.33
FTA World	**-18.50**	**-22.08**	**-2.36**	**16.42**	**na**
MSCI World	**-18.13**	**-21.10**	**-2.27**	**16.51**	**14.44**

PIPER+ international funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	-11.35%	4.60%	9.05%	45.57%	24.66%
First quartile	-16.93	-9.38	2.10	22.89	18.06
Median	-18.71	-13.27	0.06	21.43	17.01
Third quartile	-20.59	-17.12	-2.53	19.92	15.92
Lowest return	-25.90	-41.33	-8.76	12.08	13.72
FTA EuroPac	**-21.53**	**-28.51**	**-4.23**	**19.26**	**na**
MSCI EAFE	**-21.12**	**-27.40**	**-3.99**	**19.61**	**16.12**

PIPER+ balanced/TAA funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	2.71%	11.52%	12.87%	20.29%	20.76%
First quartile	-2.67	2.92	8.13	14.75	15.68
Median	-6.35	-0.72	6.33	13.15	14.24
Third quartile	-8.30	-3.53	4.71	11.77	13.33
Lowest return	-23.17	-17.31	-3.11	6.18	10.79



Top decile PIPER commingled fixed-income funds

3-month returns

	%
Shearson Trust (IF1), Del.	2.5
First Nat'l of Maryland	2.5
Chancellor Capital (Reserve)	2.4
General American (S.A. 6), Mo.	2.4
IAA Trust (Gov't G), Ill.	2.4
Chase-CMB (Short-interm.), N.Y.	2.4
New York Life (S.A. 5)	2.3
Dauphin Deposit (Short term), Pa.	2.3
Ameritrust (Reserve), Ohio	2.3
Comerica (Interm.), Mich.	2.3
Star Bank (Interm.), Ohio	2.3
Texas Commerce (Ltd. term)	2.3
Dominion Trust (Stable cap. B), Va.	2.2
AmSouth (Ltd. mat.), Ala.	2.2
Shearson Trust (IF2), Del.	2.2
First Interstate of Okla. (Interm.)	2.2
Southeast Bank, Fla.	2.2
Prudential (Struc. mat.), N.J.	2.2
Mercantile Safe (Interm.), Md.	2.2
Bankers Trust (GIC), N.Y.	2.2
Valley Fidelity, Tenn.	2.2
Signet Trust (Stable value), Va.	2.1
IDS Trust (GIC), Minn.	2.1
Crestar Bank (Short term), Va.	2.1
American Nat'l Bank, Ind.	2.1
SLB G/C	**0.6**

1-year returns

	%
First Nat'l of Maryland	10.5
First Florida Bank	10.3
General American (S.A. 6), Mo.	10.2
Mercantile Safe (Interm.), Md.	9.8
Bankers Trust (Mtg. passthru)	9.8
SW Nat'l Bank of Pennsylvania	9.7
AmSouth (Ltd. mat.), Ala.	9.7
Chase-CMB (Sec. mtg.), N.Y.	9.6
Chase-CMB (Short-interm.), N.Y.	9.4
Prudential (Struc. mat.), N.J.	9.4
Ameritrust (Reserve), Ohio	9.4
IAA Trust (Gov't G), Ill.	9.3
Wellington Trust (Interm.), Mass.	9.3
Shawmut Bank (Interm.), Mass.	9.2
Dominion Trust (Stable cap. B), Va.	9.2
First Interstate of Okla. (Interm.)	9.1
Comerica (Interm.), Mich.	9.1
Continental (Interm.), Ill.	9.1
Valley Fidelity, Tenn.	9.1
New York Life (S.A. 5)	9.1
Star Bank (Interm.), Ohio	9.1
Crestar Bank (Short term), Va.	9.1
Dauphin Deposit (Short term), Pa.	9.1
IDS Trust (GIC), Minn.	9.0
Central Fidelity (Short term), Va.	8.9
SLB G/C	**6.8**

5-year returns

	%
Transamerica (S.A. T2), Calif.	12.9
Meridian, Pa.	12.7
United Capital, Colo.	12.5
General American (S.A. 9), Mo.	11.7
Prudential (Long term), N.J.	11.7
Beverly Trust, Ill.	11.7
Equitable Capital (No. 5), N.Y.	11.6
The Principal, Iowa	11.5
Chase-CMB (Long term), N.Y.	11.5
IAA Trust (B), Ill.	11.5
Boatmen's Trust (F), Mo.	11.5
Connecticut Nat'l Bank	11.4
Bankers Trust (Mtg. passthru)	11.4
Union Bank (Long term), Calif.	11.4
Sunburst Bank, Miss.	11.4
LaSalle Nat'l (Gov't corp.), Ill.	11.4
General American (S.A. 6), Mo.	11.3
First Nat'l of Amarillo, Texas	11.3
Harris Trust, Ill.	11.2
Crown Life (U.S.), Ontario	11.0
Pacific Financial, Calif.	11.0
Morgan Guaranty, N.Y.	11.0
Aetnal Life (Shares), Conn.	10.9
SLB G/C	**10.0**

10-year returns

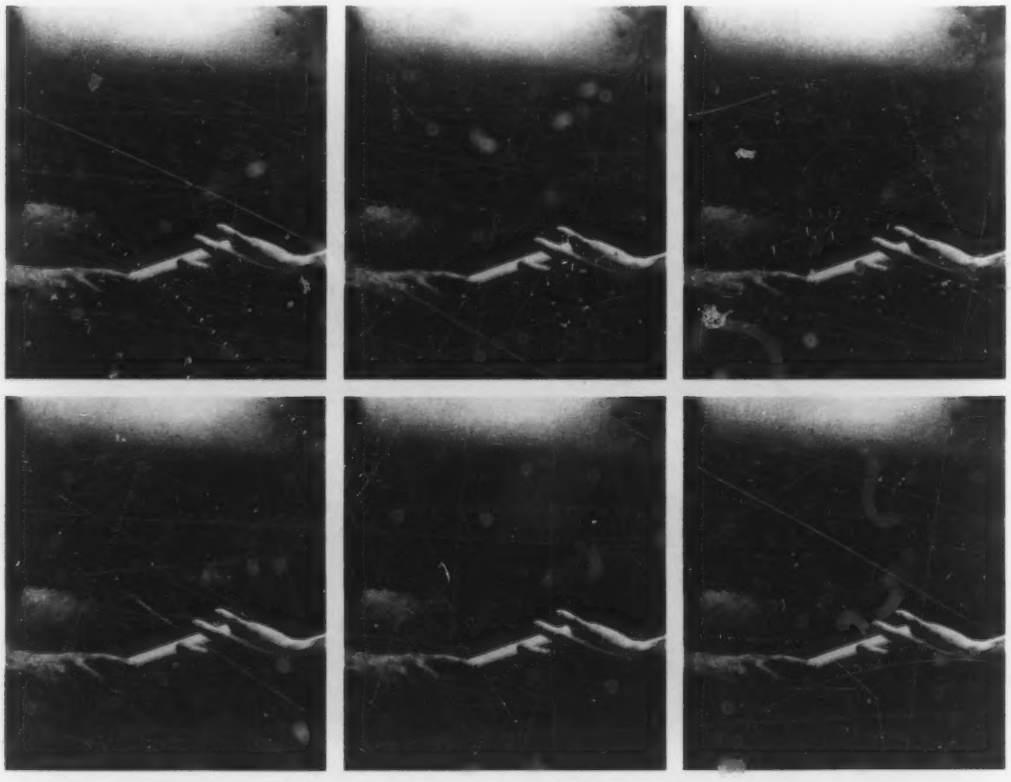
	%
Transamerica (S.A. T2), Calif.	15.5
Meridian, Pa.	14.8
United Capital, Colo.	14.3
Sovran Capital, Va.	14.0
Beverly Trust, Ill.	13.8
First Kentucky Trust	13.7
Life of Virginia	13.7
Connecticut Nat'l Bank	13.6
Boatmen's Trust (F), Mo.	13.6
IAA Trust (B), Ill.	13.5
Pacific Financial, Calif.	13.4
First Nat'l of Amarillo, Texas	13.4
First Interstate of Calif. (Mgd.)	13.4
First Variable Life, Ark.	13.4
ASB Capital, D.C.	13.3
Society Nat'l, Ohio	13.2
SLB G/C	**12.4**

Top decile PIPER commingled equity funds

3-month returns

	%
The Phoenix, Conn.	-2.2
SW Nat'l Bank of Pennsylvania	-2.9
Beverly Trust, Ill.	-5.4
Weststar Bank, Okla.	-5.7
United Carolina Bank, N.C.	-6.2
First Wisconsin (Portico & gro.)	-7.4
Assoc. Manitowoc, Wis.	-7.4
Nat'l Westminster Bank, N.J.	-7.6
Summit Bank, Ind.	-7.6
Columbus Bank, Ga.	-8.3
Penn Mutual Life (S.A. D), Pa.	-8.4
First of America, Mich.	-8.8

We Are What We Repeatedly Do. Excellence Then Is Not An Act But A Habit. *Aristotle*



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United Missouri	−8.8
Midlantic (Inc.), N.J.	−8.9
First Nat'l of Litchfield (B), Conn.	−9.0
Provident Mutual (S.A. 1), Pa.	−9.1
Wilmington Trust (Total ret.), Del.	−9.1
Employer Life/Wausau (S.A. 1)	−9.2
Fifth Third Bank-Miami, Ohio	−9.3
Dominion Capital (Corp.), Va.	−9.4
Jefferson Nat'l Bank, Va.	−9.4
Sovran Capital, Va.	−9.5
Bank of Tokyo, N.Y.	−9.6
Johnson County Bank, Kan.	−9.7
Assoc. Bank-Neenah (I), Wis.	−9.7
Stock Yards Bank, Ky.	−9.7
First NH Invst. (A)	−9.8
Aliac (Variable), Conn.	−9.8
S&P 500	**−13.9**

1-year returns

	%
The Phoenix, Conn.	8.3
Princeton Bank, N.J.	6.5
SW Nat'l Bank of Pennsylvania	3.5
Commercial Capital (Sp. gro.), Ark.	2.4
Bank One Wis. Trust (Growth)	0.7
United Carolina Bank, N.C.	0.7
Assoc. Manitowoc, Wis.	0.4
Chancellor Capital (Sel. gro.)	0.3
Beverly Trust, Ill.	0.2
Weststar Bank, Okla.	−0.4
Commercial Capital, Ark.	−0.7
Mercantile Bank Joplin (Gro. C)	−0.8
Chicago Title & Trust	−0.9
American Nat'l Bank, Ind.	−1.0
First City Texas, Houston (A/1)	−1.4
Aliac (Variable), Conn.	−1.4
Commerce Bank, Mo.	−1.6
First Wisconsin (Portico & gro.)	−1.6
Great West (VAAA), Manitoba	−1.6
Summit Bank, Ind.	−2.1
The Phoenix (Growth S), Conn.	−2.2
Nat'l Westminster Bank, N.J.	−2.2
Aetna Life (S.A. 2), Conn.	−2.3
First Nat'l of Omaha (D), Neb.	−2.4
Sentry Equity (S.A. B), Wis.	−2.4
Columbus Bank, Ga.	−2.6
Provident Mutual (S.A. 1), Pa.	−2.7
Hibernia Nat'l (G), La.	−2.7
S&P 500	**−9.4**

5-year returns

	%
Chancellor Capital (Sel. gro.)	21.0
Sun Bank, Fla.	20.9
Shearson Trust (EF7), Del.	20.6
Pacific Financial (Sm. cap.)	19.6
IDS Trust (Core), Minn.	19.5
Bank One-Indianapolis (L)	19.3
Assoc. Manitowoc, Wis.	18.4
John Hancock (Divers. 1K), Mass.	17.5
State Street (Matrix syn.), Mass.	17.5
Pacific Financial (Cap. app.)	17.4
First Nat'l Amarillo, Texas	17.1
The Phoenix, Conn.	17.0
First Illinois (Corp.)	17.0
State Bank (C), Ohio	17.0
Southtrust Bank, Ala.	17.0
South Carolina Nat'l	16.9
Pacific Financial (Inc.)	16.9
NCNB Nat'l, N.C.	16.9
Bank One Wis. Trust (Growth)	16.8
Puget Sound Nat'l, Wash.	16.6
Chancellor Capital (Growth)	16.4
Beverly Trust, Ill.	16.4
Chancellor Capital (Indexplus)	16.3
First Illinois (Personal)	16.2
S&P 500	**14.8**

10-year returns

	%
Sun Bank, Fla.	22.9
Pacific Financial (Cap. app.)	20.4
First Nat'l Amarillo, Texas	18.5
Provident Mutual (S.A. 1), Pa.	17.7
First Fidelity (Select value), N.J.	17.1
First NH Invst. (A)	17.1
Merus Capital (Income), Calif.	17.0
First Union Nat'l, N.C.	16.6
Wheeling Dollar (B), W. Va.	16.6
U.S. Nat'l Bank, Texas	16.5
Manufacturers Detroit (E)	16.3
First Nat'l of Omaha (D), Neb.	16.2
Merus Capital (Gro. plus), Calif.	16.1
Lake Shore Nat'l, Ill.	16.1
Connecticut Mutual	16.0
First of America, Mich.	16.0
Aliac (Variable), Conn.	16.0
S&P 500	**14.0**

Top decile PIPER commingled special equity funds

3-month returns

	%
Lincoln Nat'l (Emerg. gro.), Ind.	−3.0
Liberty Nat'l (Growth), Ky.	−4.6
Shearson Trust (EF2), Del.	−7.1
Markston Invst. (V.A. 15), N.Y.	−7.8
Central Fidelity (Growth), Va.	−10.5
Assoc. Kellog (Growth), Wis.	−11.8
First Asset Mgmt. (II), Minn.	−12.4
S&P 500	**−13.9**
Russell 2000	**−24.5**

1-year returns

	%
Chancellor (Emerg. health), N.Y.	1.5
Shearson Trust (EF2), Del.	1.2
Markston Invst. (V.A. 15), N.Y.	1.1
Equitable Capital (Gro. 3), N.Y.	−0.5
Lincoln Nat'l (Emerg. gro.), Ind.	−2.6
Liberty Nat'l (Growth), Ky.	−2.9
Assoc. Kellogg (Growth), Wis.	−3.0
S&P 500	**−9.4**
Russell 2000	**−27.2**

5-year returns

	%
Shearson Trust (EF2), Del.	26.0
Shearson Trust (EF3), Del.	22.1
First City Texas (G/1)	17.8
Connecticut Nat'l Bank	17.1
Putnam Cos. (Growth), Mass.	16.1
S&P 500	**14.8**
Russell 2000	**4.5**

10-year returns

	%
Connecticut Nat'l Bank	17.1
First Asset Mgmt. (II), Minn.	15.7
Norwest Bank, Minn.	15.6
S&P 500	**14.0**
Russell 2000	**8.8**

Top half PIPER commingled international funds

3-month returns

	%
Morgan Guaranty (Bond), N.Y.	6.7
Ameritrust Texas (Bond)	6.6
Citicorp Invst.(Fixed), N.Y.	6.5
Chase-CMB (Fixed), N.Y.	6.4
Global Fixed Income (Glo. yield)	6.1
Global Fixed Income (Bond)	5.3
Global Fixed Income (Glo. bond)	3.5
IAA Trust (Fixed), Ill.	−4.3
Trust Co./West (Global), Calif.	−11.5
Lincoln Nat'l (S.A. 22), Ind.	−13.1
Connecticut Mutual (Overseas)	−13.9
Assoc. Bank-Neenah (World)	−14.0
Boatmen's Trust (Eq. W), Mo.	−14.7
Morgan Guaranty (Equity), N.Y.	−14.9
NCNB Nat'l (Stock), N.C.	−15.7
PCM Int'l (Print 2 equity), N.J.	−16.2
CL Capital (Stock), Ga.	−16.3
Provident Capital (Low p/e), Pa.	−16.6
Putnam Cos. (Equity), Mass.	−16.6
Wellington (Emerg. eq.), Mass.	−16.9
Citicorp Invst. (Equity), N.Y.	−17.0
IDS Int'l (Equity), Minn.	−17.2
MSCI World	**−18.1**
FTA World	**−18.5**
MSCI EAFE	**−21.1**
FTA Europe & Pacific	**−21.5**

1-year returns

	%
Global Fixed Income (Glo. yield)	18.8
Citicorp Invst. (Fixed), N.Y.	18.3
Morgan Guaranty (Bond), N.Y.	16.0
Global Fixed Income (Glo. bond)	11.8
Chase-CMB (Fixed), N.Y.	9.9
Ameritrust Texas (Bond)	9.4
Global Fixed Income (Bond)	7.3
IAA Trust (Fixed), Ill.	1.9
IDS Int'l (Equity), Minn.	−0.4
NCNB Nat'l (Stock), N.C.	−2.0
Lincoln Nat'l (S.A. 22), Ind.	−4.8
Putnam Cos. (Equity), Mass.	−5.3
Wellington (Emerg. eq.), Mass.	−7.0
Travelers Cos. (S.A. W), Conn.	−8.6
CL Capital (Stock), Ga.	−9.0
Trust Co./West (Global), Calif.	−9.1
The Principal (Stock), Iowa	−10.0
PCM Int'l (Print 2 eq.), N.J.	−10.4
Assoc. Bank-Neenah (World)	−10.5
Citicorp Invst. (Equity), N.Y.	−11.4
Wellington (Stock), Mass.	−11.4
Connecticut Mutual (Overseas)	−12.5
MSCI World	**−21.1**
FTA World	**−22.1**
MSCI EAFE	**−27.4**
FTA Europe & Pacific	**−28.5**

5-year returns

	%
Provident Capital (Low p/e), Pa.	24.8
NCNB Nat'l (Stock), N.C.	23.8
Bessemer Trust (E), N.Y.	23.6
Wellington (Pacific Basin), Mass.	22.6
Bankers Trust (Equity), N.Y.	22.5
Putnam Cos. (Equity), Mass.	21.5
Global Fixed Income (Glo. bond)	21.1
CL Capital (Stock), Ga.	20.8
American Nat'l Chicago (Equity)	20.1
Wellington (Stock), Mass.	20.0
IDS Int'l (Equity), Minn.	20.0
Boatmen's Trust (Eq. W), Mo.	20.0
Chase-CMB (EAFE), N.Y.	19.7
MSCI EAFE	**19.6**
FTA Europe & Pacific	**19.3**
MSCI World	**16.5**
FTA World	**16.4**

10-year returns

	%
American Nat'l Chicago (Equity)	15.7
Bankers Trust (Equity), N.Y.	17.3
MSCI EAFE	**16.1**
Citcorp Invst. (Equity), N.Y.	14.8
MSCI World	**14.4**

Top decile PIPER + fixed-income funds

3-month returns

	%
American & European (P-max)	3.4
Income Research (En. cash)	2.7
Smith Breeden Assoc. (Short)	2.5
Longfellow Invst. (Short)	2.5
Capitalcorp (Active 0-5)	2.5
Chase Invst. Counsel	2.4
Wells Fargo Invst. (1-3 yr. gov't)	2.4

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Anhalt/O'Connell (Res. maturity)	2.3
RCM Capital Mgmt. (Short)	2.3
Mass. Financial (Ltd. maturity)	2.3
IDC Portfolio (2 yr. trip)	2.3
IDC Portfolio (5 yr. trip)	2.3
IDC Portfolio (GNMA trip)	2.3
Brundage, Story & Rose	2.2
Reimer & Koger (Stable value)	2.2
Shelby County Gov't	2.2
Pacific Invst. (Low duration)	2.2
IDC Portfolio (3 yr. trip)	2.2
RNC Capital (Govt.)	2.2
SLB G/C	**0.6**

1-year returns

	%
Smith Breeden Assoc. (Short)	11.0
Atlantic Port Analytics (A)	10.0
Income Research (En. cash)	9.9
Pacific Invst. (Low duration)	9.9
STW Fixed Income (Short)	9.8
Longfellow Invst. (Short)	9.8
American Asset Mgmt.	9.5
Reimer & Koger (Stable value)	9.4
Western Asset (Ltd. maturity)	9.4
Standish, Ayer & Wood (Con. risk)	9.4
Pine Tree Capital	9.3
Hoisington Invst.	9.3
Chase Invst. Counsel	9.3
Wells Fargo Invst. (1-3 yr. gov't)	9.3
Davis Hamilton (Inter.)	9.3
Criterion Invst. (Mtg.)	9.2
Neuberger & Berman (Ltd. mat.)	9.2
Chandler & Chambless (Short)	9.2
Shelby County Gov't	9.2
SLB G/C	**6.8**

5-year returns

	%
Bridgewater Asset (Active dur.)	15.3
American & European (P-max)	14.1
Hoisington Invst.	13.8
McKee Invst.	13.5
STW Fixed Income (Long)	13.2
Meridian Invst.	12.7
Wolf Webb Burk/Campbell (Int. rt.)	12.3
Ferguson & Wellman (Int. rate)	12.2
Consistent Asset (Total return)	12.1
Huff Asset Mgmt.	12.1
Dolan Capital Mgmt.	11.9
Trevor Stewart Burton & Jacobson	11.9
Pacific Invst. (Total return)	11.8
Smith Affiliated Capital	11.6
SLB G/C	**10.0**

10-year returns

	%
Smith Affiliated Capital	16.0
Consistent Asset (Total return)	15.2
STW Fixed Income (Long)	15.1
Wolf Webb Burk/Campbell (Int. rt.)	15.0
Western Asset (Active core)	14.9
Greenwich Asset Mgmt.	14.8
Meridian Invst.	14.8
Dolan Capital Mgmt.	14.6
Independence One (PRIMA X)	14.5
SLB G/C	**12.4**

Top decile PIPER + equity funds

3-month returns

	%
Securities Res. (Kemper Summit)	0.1
Securities Res. (Putnam Voyage)	−0.4
Securities Res. (Nat'l)	−0.5
Securities Res. (Dreyfus Growth)	−0.7
Gateway Advisors (Index plus)	−2.4
Willoughby Holin/Rentner (Gro.)	−3.2
DeJarnette Invst.	−3.4
Friess Assoc. (Brandywine)	−3.8
Friess Assoc.	−3.9
Birmingham Capital	−4.0
Cumberland Advisors	−4.9
Red Oak Advisors	−5.1
Edward C. Rorer	−6.7
Dreyfus Mgmt. (Large cap.)	−7.0
Forstmann Leff	−7.1
Webster Capital (Max. return)	−7.4
Institutional Capital	−7.5
Analytic Invst. (Hedged)	−7.5
Lehman Ark (Spec. sit.)	−7.8
Renaissance Invst.	−7.8
Forstman Leff (Agg. AA)	−8.0
NWQ Invst.	−8.2
Oak Hall Capital	−8.2
RCB Trust (Defensive)	−8.5
Thompson, Siegel & Walmsley	−8.6
Chemical Invst. (Real inc. gro.)	−8.7
Balch, Hardy & Scheinman	−8.7
Todd Invst.	−8.8
Cowen Asset (Inc. & growth)	−8.9
The Phoenix (Ind. growth)	−9.0
MPI Invst.	−9.2
Aiyer Invst.	−9.5
S&P 500	**−13.9**

1-year returns

	%
Securities Res. (Putnam Voyage)	20.6
Securities Res. (Kemper Summit)	18.5
Securities Res. (Nat'l)	12.7
Gateway Advisors (Index plus)	10.2
Friess Assoc. (Brandywine)	8.8
Friess Assoc.	8.2
Lehman Ark (Spec. sit.)	7.2
Securities Res. (Dreyfus Growth)	6.8
Dawson Samberg (Growth Pequot)	6.4
Red Oak Advisors	4.8
DeJarnette Invst.	4.4
Birmingham Capital	4.4
Dawson Samberg	1.5
Tukman Capital	0.4
Webster Capital (Max. return)	0.3
Equitable Capital (Sp. growth)	−0.4
Edward C. Rorer	−1.1
Frontier Capital (Trad. growth)	−1.4
Thompson, Siegel & Walmsley	−1.4
Cheswick Invst.	−1.7
Aetna Life (Large cap. growth)	−2.0
Cumberland Adivsors	−2.1
Caldwell & Orkin	−2.2
Lincoln Capital	−2.3
Heartland Capital (Growth)	−2.4
General American (Closed end)	−2.4
Scudder Stevens Clark (Qual.)	−2.6
First Nat'l Bank/Omaha (Value)	−2.7
Willoughby Holin/Rentner (Gro.)	−3.1
The Phoenix (Ind. growth)	−3.3
Cooke & Bieler	−3.3
Analytic Invst. (Hedged)	−3.3
S&P 500	**−9.4**

5-year returns

	%
C.H. Brown (Computer dir.)	26.0
Friess Assoc.	24.3
Quantitative Asset (En. index)	23.4
Cheswick Invst.	22.4
Oak Assoc. (Firestone)	21.8
Combined Capital (Qual. growth)	21.3
Friess Assoc. (Brandywine)	21.3
DeJarnette Invst.	21.1
Pacific Cent. (Emg. gro./sm. cap.)	20.3
Columbus Circle	20.0
Securities Res. (Dreyfus Growth)	20.0

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Fannie Mae appreciates NYCERS' and others' participation in this breakthrough program and would invite other pension funds all across the country to look into ways that Fannie Mae's community lending initiatives can work in their communities.

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Jurika & Voyles	19.8
Davis, Weaver & Mendel	19.8
Tukman Capital	19.7
Balch Hardy & Scheinman	19.6
Institutional Capital	19.5
Red Oak Advisors	19.4
Investment Res. (Max growth)	19.3
Lincoln Capital	18.9
Turner Neill Invst.	18.8
Beacon Invst.	18.8
Hutson Mgmt. (Growth)	18.8
Breau Capital	18.7
Lehman Ark (Spec. sit.)	18.4
Fayez Sarofim	18.3
Lynch & Mayer (Growth)	18.2
Analytic Invst. (Option growth)	18.1
S&P 500	**14.8**

10-year returns

	%
C.H. Brown (Computer dir.)	25.0
Securities Res. (Dreyfus Growth)	22.4
Balch, Hardy & Scheinman	21.9
Severn Assoc. (I)	21.6
GAMCO Investors (ERISA)	21.4
Friess Assoc.	21.3
Cadence Capital (Large cap.)	20.5
Roger Engemann & Assoc.	20.3
Capital Growth Mgmt.	19.9
Ashland Mgmt.	19.8
Caldwell & Orkin	19.8
Columbus Circle	19.7
Friess Assoc. (Brandywine)	19.6
Wilshire Asset (Sm. comp. value)	19.1
Red Oak Advisors	18.7
Tukman Capital	18.6
Hanson Invst.	18.6
S&P 500	**14.0**

Top decile PIPER+ special equity funds

3-month returns

	%
Feshbach Brothers (Southgate)	32.6
IDC Portfolio (Utility)	−0.7
W.H. Reaves (Utility/energy)	−2.7
Fidelity Mgmt. (High income)	−3.4
S&P 500	**−13.9**
Russell 2000	**−24.5**

1-year returns

	%
Feshbach Brothers (Southgate)	104.0
NFJ Invst. Group (Select)	12.6
IDC Portfolio (Utility)	1.9
W.H. Reaves (Utility/energy)	1.1
S&P 500	**−9.4**
Russell 2000	**−27.2**

5-year returns

	%
NFJ Invst. Group (Select)	41.3
Feshbach Brothers (Southgate)	40.7
W.H. Reaves (Utility/energy)	17.9
S&P 500	**14.8**
Russell 2000	**4.5**

10-year returns

	%
Cramer Rosenthal McGlynn	18.7
IDC Portfolio (Utility)	17.8
S&P 500	**14.0**
Russell 2000	**8.8**

Top half PIPER+ global equity funds

3-month returns

	%
Van Eck Assoc. (World trends)	−13.4
Burgess Capital	−13.5
Brinson Partners	−13.6
Capital Guardian (New pers. F)	−14.0
Burgess Capital (Comp.)	−14.3
Scudder Stevens & Clark	−15.7
James Capel Fund Mgmt.	−16.1
Warburg Invst. (SL3)	−16.2
Credit Suisse Asset	−16.4
Templeton Invst.	−16.5
Henderson Admin.	−16.6
IDS Int'l	−16.9
Lombard Odier	−17.0
G.T. Capital	−17.2
MSCI World	**−18.1**
FTA World	**−18.5**

1-year returns

	%
IDS Int'l	−1.4
Capital Guardian (New pers. F)	−4.9
Credit Suisse Asset	−5.1
Burgess Capital	−5.7
Van Eck Assoc. (World trends)	−7.9
Ivory & Sime Int'l (3)	−8.7
G.T. Capital	−8.7
Putnam Cos.	−9.2
Burgess Capital (Comp.)	−9.4
Scudder Stevens & Clark	−9.9
Warburg Invst. (SL3)	−10.2
Brinson Partners	−10.3
HD Int'l	−11.7
Marvin & Palmer Assoc.	−11.8
MSCI World	**−21.1**
FTA World	**−22.1**

5-year returns

	%
Burgess Capital	26.1
WorldInvest	23.5
Schroder Capital (X)	20.4
Brinson Partners	19.8
Ivory & Sime Int'l (3)	19.7
Warburg Invst. (SL3)	19.6
Stewart, Ivory & Co.	19.5
Scudder Stevens & Clark	19.4
Credit Suisse Asset	19.2
IDS Int'l	19.0
HD Int'l	18.5
Marvin & Palmer Assoc.	16.9
MSCI World	**16.5**
FTA World	**16.4**

10-year returns

	%
Burgess Capital (Comp.)	21.3
WorldInvest	17.0
Templeton Invst.	16.7
MSCI World	**14.4**

Top half PIPER+ international equity

3-month returns

	%
Wellington Trust (Emerging)	−11.4
Brinson Partners	−12.5
Henderson Admin. (EAFE)	−13.9
Boatmen's Trust (W)	−14.7
J.P. Morgan Invst.	−14.9
CIGNA Int'l Invst.	−14.9
Schroder Capital (Sm. cos.)	−15.5
Grantham Mayo v.Otterloo (Q)	−15.5
Baille Gifford (NCNB Texas)	−15.6
Lombard Odier (EAFE)	−15.8
PCM Int'l (Print 2)	−16.2
Templeton Invst	−16.5
Putnam Cos.	−16.5
Provident Capital (Low p/e)	−16.6
IDS Int'l (Active/passive)	−16.7
Ivory & Sime Int'l (5)	−16.8
Marvin & Palmer (Emerg. mkts.)	−16.9
UBS Philips & Drew (EAFE)	−16.9
Citicorp Invst.	−17.0
Fidelity Mgmt. (Overseas)	−17.0
Credit Suisse Asset (EAFE)	−17.1
SBC Portfolio (ERISA 1)	−17.3
Union Capital	−17.4
Marsh Cunningham	−17.6
Scudder Stevens & Clark	−17.7
Morgan Stanley (S. Butt/EAFE)	−17.7
Pictet Int'l (Pos. value const.)	−17.7
Rowe Price Fleming (For. disc.)	−17.7
G.T. Capital (EAFE)	−17.9
Schroder Capital (EAFE V)	−18.3
Marsh Cunningham (GE)	−18.3
Baring Int'l (1 EAFE)	−18.4
Grantham Mayo v.Otterloo (A)	−18.5
Matuschka Moser (EAFE)	−18.6
Baring Int'l (Active/passive)	−18.7
Rowe Price Fleming (Trp.)	−18.7
MSCI EAFE	**−21.1**
FTA Europe & Pacific	**−21.5**

1-year returns

	%
CIGNA Int'l Invst.	4.6
Schroder Capital (Sm. cos.)	3.5
Wellington Trust (Emerging)	−0.7
Baillie Gifford (NCNB Texas)	−1.3
Marvin & Palmer (Emerg. mkts.)	−1.8
Grantham May v.Otterloo (Q)	−2.2
Putnam Cos.	−4.3
Morgan Stanley (S. Butt/EAFE)	−4.7
Henderson Admin. (EAFE)	−5.0
Fidelity Mgmt. (Overseas)	−5.3
Credit Suisse Asset (EAFE)	−6.3
G.T. Capital (EAFE)	−7.4

HARRIS CONVERSATIONS FOR THE 90s:

THE DEREGULATION EXPERIENCE

A ROUNDTABLE DISCUSSION WITH ALFRED E. KAHN
and a select group of business leaders.

Known as the father of deregulation, Prof. Alfred E. Kahn is an internationally renowned economist.

Recognizing that a free exchange of ideas is crucial to shaping the way that businesses will compete in the coming decade, Harris Bank invited Prof. Kahn to explore the impact that deregulation has had–and will have–on the American economy.

The following discussion, one in a series of conversations with small groups of business leaders and today's most exciting thinkers, took place earlier this year:

The deregulation movement really goes back to 1958, when the FCC first permitted large industrial companies to provide their own private communications services.

In the last 15 years or so, we've experienced almost total deregulation of the airlines, the trucking industry, the railroads, cable television, buses, oil, and natural gas. Telecommunications and the electric and gas utilities have experienced some very dramatic changes in the same direction.

Most economists would agree, I think, that these deregulations have been a success, on the whole. They have demonstrated the superiority of the competitive market over government planning, by offering consumers lower prices and a greater variety of price and quality options, and by forcing producers to be more efficient and innovative.

On the other hand, the free market does not work perfectly, and there have been some problems and some disappointments.

Haven't the main failures of deregulation occurred in those areas where we've relied not on the market, but on the government?

Definitely. In the case of the S&Ls, the removal of the ceilings on the interest rates that they were permitted to pay necessitated, in turn, relaxation of the restrictions on their lending and investment activities. These were both forms of deregulation, and they surely helped create the problems we're now experiencing. But the other essential ingredient was government guarantee of their deposit liabilities, which made it possible for them to continue to attract deposits no matter how badly their loans and investments were turning out.

In other words, the fundamental problem was that we didn't deregulate all the way. Federal deposit insurance protected them from the discipline of the market. Or, if we were going to retain virtually complete government insurance of their deposits, the failure was one of government to perform the corresponding essential policing functions—to maintain minimum capital-to-deposit ratios and close down effectively insolvent institutions.

In another case, congestion and delays in air travel have increased because government has failed to respond to the upsurge in demand—a genuine success of deregulation—by expanding airport and air traffic control capacity.

Deregulation doesn't mean that you fire your police force, or your antitrust administration. Indeed, in important ways, it makes these policing responsibilities of government more important, not less.

Isn't all regulation inherently arbitrary?

I don't see how that can be true, as a general proposition, so long as there are legitimate social purposes that cannot be adequately served under simple laissez-faire.

The central requirement for sensible public policy is to distinguish regulations that suppress competition—which I think are rarely healthy—from regulations that supplement or preserve it, or make it work better, or serve social goals, like protection of the environment or public health and safety, that the competitive market simply cannot adequately serve.

Can you justify regulation for paternalistic reasons?

Individual choice is a cornerstone of our society. But can you really conceive of a humane society in which we place no limitations whatever on the freedom of individual consumers or workers to expose themselves to a threat to their health and safety? Or in which food and drugs are not honestly labelled?

Economic deregulation of trucking over the last 15 years, for example, has been very salutary. But that doesn't mean we shouldn't regulate the number of hours that truck drivers are on the road, and enforce those regulations with frequent random roadside inspections.

In a free society, we do tend to shun paternalism. But that surely does not preclude providing accurate information, or protection from drivers of unsafe trucks or from the emissions of coal-fired electric generating stations.

Is it fair to expose American producers to the competition of products from foreign countries whose governments do not impose environmental restrictions as stringent as ours?

It seems to me that if foreign governments produce degradation of our environment as well as their own, it would be proper for us to impose countervailing duties on their goods. That would give them the same incentives as our own companies have to protect our common air and water.

But what if the effect is to degrade only their environment? If perhaps because they are very poor, foreigners are willing to pay the price of dirtier air or water for a higher material standard of living, should we refuse to buy their goods?

The responsibility of our economic policies is to make available to the American public the widest range of products at the lowest cost—including environmental cost. If other people are willing to exploit themselves, or use up their soil, we do neither ourselves nor them a favor by putting taxes on their products.

This is the second in a series of Harris Conversations for the 90s. Other topical roundtables that can help our Harris customers be more competitive will follow.

To receive a longer version of this discussion with Alfred Kahn, call Donna Haywood at (312) 461-5554.

HARRIS BANK

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Stormy

Continued from page 17

the fund is to diversify by property and by geography and to know your borrower. The fund has very low volatility and has a standard deviation of less than 3%. Pension buyers like that; there is also a very high cash-on-cash return as opposed to real estate equity. So liquidity is not a problem," he said.

Ellen Friedenberg, portfolio manager at Shearson Lehman Advisors, New York, said the two fixed-income funds are both managed in a similar fashion. She said the funds focus on "our knowledge of interest rates" and contain only U.S. government and agency instruments. She said the return objective is 1% to 3% over 90-Day Treasury bills and has an average maturity of 4.25 years.

For the 12 months, First National Bank of Maryland topped the PIPER fixed-income universe with 10.52%.

Transamerica Life Insurance Co., Los Angeles, was in top position for the five-year period with 12.89%. Following were Meridian Investment Co., Valley Forge, Pa., with 12.65%, and United Capital Management, Denver, 12.47%.

Transamerica, Meridian and United Capital also finished in the top five for the 10-year period.

The Shearson Lehman Brothers index was up 10% for five years and 12.41% for 10 years.

Ken Holmes, vice president at Meridian, said the $28 million employee benefit income fund contains high-quality U.S. government and agency instruments with an average maturity of about seven years. "The best performing bonds during those periods (five and ten years) were mortgage related," he said. The fund currently has a high percentage of government securities.

The Meridian fund "is an AA+ fund but at any given time three-fourths of the fund is AAA."

Lon Schreur, chief investment officer at United Capital, said the $70 million bond fund is a collective fund managed for United Bank of Denver, and for the past two years has had an average maturity of about two years. Between 1980 and 1986 the average maturity was 20 to 25 years, he said.

Mr. Schreur said the fund uses interest rate anticipation and now contains about 90% U.S. government securities.

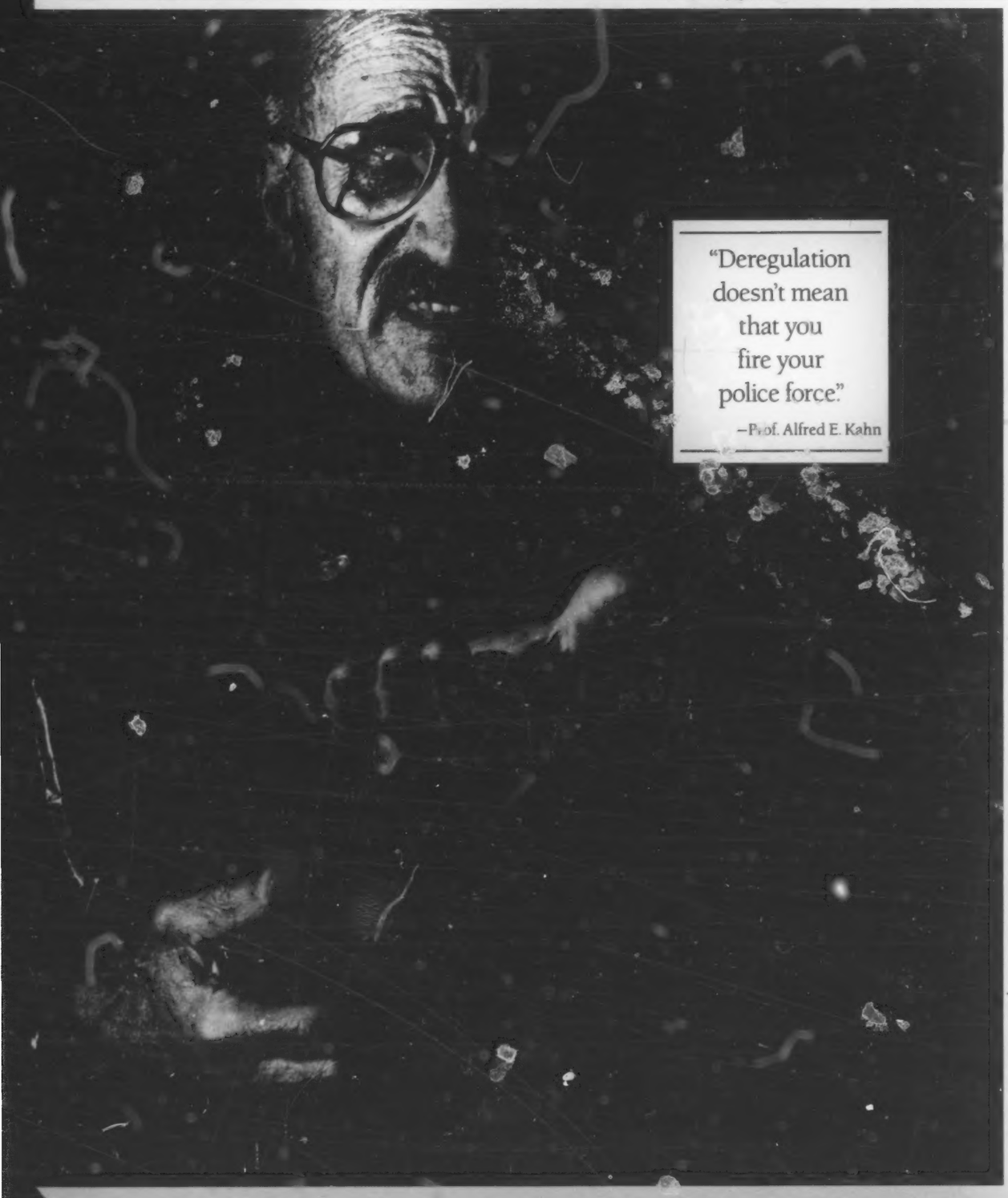
The Bankers Trust Co. GIC fund, with $40 million in total assets, finished the quarter with at 2.18%.

Jerry Chipkin, manager-guaranteed investments at Bankers Trust, said the bank's commingled GIC fund benefits from some of the "creative approaches" used in its separate account management.

In the PIPER+ fixed-income universe, American & European Investment Corp., Bethesda, Md., finished the quarter on top with 3.35%, followed by Income Research & Management, Boston, 2.71%; and Smith Breeden Associates, Boston, 2.53%.

For the one-year period, Smith Breeden topped the list with 11.02%.

Bridgewater Asset Management, Wilton, Conn., topped the five-year universe with 15.31%, while Smith Affiliated Capital, New York, topped the 10-year performance results with 16.02%.■



Continued from page 22

IDS Int'l (Active/passive)	–8.1
Templeton Invst.	–8.1
Rowe Price Fleming (Discovery)	–8.1
Rowe Price Fleming (For. disc.)	–8.6
Grantham Mayo v.Otterloo (A)	–8.7
Scudder Stevens & Clark	–8.9
Dillon, Read Int'l (EAFE)	–9.6
Pictet Int'l (Pos. val. unconst.)	–9.8
Ivory & Sime Int'l (5)	–9.9
PCM Int'l (Print 2)	–10.4
Brinson Partners	–10.8
Rowe Price Fleming ((Trp.)	–11.0
Lombard Odier (EAFE)	–11.2
UBS Phillips & Drew (EAFE)	–11.2
SBC Portfolio (ERISA 1)	–11.3
Citicorp Invst.	–11.4
Wellington Trust	–11.5
Marsh Cunningham	–12.1
RCB Int'l	–12.1
Schroder Capital	–12.3
Globe Finlay (EAFE)	–12.5
Marsh Cunningham (Owens)	–13.1
Schroder Capital (EAFE V)	–13.2
J.P. Morgan Invst.	–13.3
MSCI EAFE	**–27.4**
FTA Europe & Pacific	**–26.5**

5-year returns

	%
Pictet Int'l (Pos. value unconst.)	45.6
Morgan Stanley (S. Butt/EAFE)	29.8
Marsh Cunningham	29.2
CIGNA Int'l Invst.	25.2
Provident Capital (Low p/e)	24.7
Templeton Invst.	24.1
Scudder Stevens & Clark	24.0
Grantham Mayo v.Otterloo (Q)	24.0
WorldInvest (IPEF)	23.5
Oeschle Int'l (Core)	23.3
Brinson Partners	23.1
Putnam Cos.	23.0
Baillie Gifford (NCNB Texas)	22.9
G.T. Capital (EAFE)	22.8
Rowe Price Fleming (For. disc.)	22.8
Bankers Trust	22.7
Henderson Admin. (EAFE)	22.6
Fidelity Mgmt. (Overseas)	22.5
HD Int'l	22.5
Globe Finlay (EAFE)	22.4
Rowe Price Fleming (Trp.)	21.9
Lombard Odier (EAFE)	21.8
Baring Int'l (Active/passive)	21.5
Baring Int'l (1 EAFE)	21.4
MSCI EAFE	**19.6**
FTA Europe & Pacific	**19.3**

10-year returns

	%
Marsh Cunningham	24.7
Pacific Financial	20.8
Oeschle Int'l (Core)	19.3
G.T. Capital (EAFE)	18.2
Putnam Cos.	17.9
Capital Guardian	17.6
Baring Int'l (1 EAFE)	17.6
Bankers Trust	17.3
MSCI EAFE	**16.1**

Top decile PIPER+ balanced/TAA funds

3-month returns

	%
Lazard Freres	2.7
Prudential Diversified (M 2)	2.5
Chicago Corp.	2.5
Crabbe Huson	2.4
Bartlett & Co.	2.3
Wilson, Kemp & Assoc.	2.2
Daniel S. Kampel Assoc.	2.2
William Blair	2.2
Fleet/Norstar Invst.	2.0
Penteq (Stocks/cash)	1.9
Kingsley Jennison McNulty & Morse	1.9
Ashfield & Co.	1.9
Federated Invst.	1.8
Merrill Lynch Asset (Value/mt. rate)	1.5
Duff & Phelps Invst. (Value)	1.4
Palm Beach Capital	1.2
Stein Roe & Farnham (Qual. gro.)	1.2
India Wharf (AC49 IRA rollover)	1.2
Mitchell Hutchins (Core growth)	1.0

1-year returns

	%
William Blair	11.5
Kingsly Jennison McNulty/Morse	11.4
Fleet/Norstar Invst.	10.5
Leylegian Invst.	10.2
EMP Capital Mgmt.	10.1
Palm Beach Capital	9.7
Ashfield & Co.	9.1

Continued on page 24

SB Partners, a Sentinel sponsored partnership, has refinanced:

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Real estate

Continued from page 17

With stores selling less, demand for space also could be off at bulk warehouses, although signs of rent "erosion" have not appeared in industrial warehouses, Mr. Saint-Pierre said.

Instead of appreciation, investors could be hit with depreciation that might put their 1990 returns below even 5%, said Mr. Saint-Pierre.

"I hate to say that, but it could happen."

But not all pension funds officers are unhappy with the performance of their real estate investments. "We have no complaints," said Neil Darling, manager and investment analyst with the $4 billion Chevron Corp. pension fund, San Francisco. The Chevron fund recently increased its real estate allocation to about 10% of total assets and plans no increase any time soon.

Though declining to give exact numbers, Mr. Darling said much of his performance is coming from the pension fund's separate account. The fund is roughly split between separate and commingled investments. He said his fund has not bought any unusual or riskier investments to get its satisfactory returns.

Prudential's Union Mortgage Account has avoided most of the problems affecting real estate by investing in straight mortgages. Tina Brownley, director of domestic marketing at Prudential Realty, said UMA is invested in office, retail and industrial mortgages ranging in size from $2 million to $40 million.

The John Hancock ForesTree I fund not only had the top second-quarter return for closed-end funds, but placed second for the year ended June 30 with a 22.2% return.

The PIPER figures are compiled by Rogers, Casey & Associates, Darien, Conn. ■

Top open-end funds (quarter ended June 30)

	%
Prudential (UMA)	3.2
John Hancock	2.8
Schroder	2.3
Chase Investors-CMB	2.0
Morgan Guaranty	1.9

Top closed-end funds (quarter ended June 30)

John Hancock (Forestree I)	11.9
State Street (AEW/State St. II)	5.7
FS Realty Partners (Paragan)	2.4
John Hancock (SERA I)	2.3
INVESCO (Inst'l Mtg. Fund)	2.3
JMB Inst'l (Group Trust III)	2.3
PM Realty (American West II)	2.3

Continued from page 23

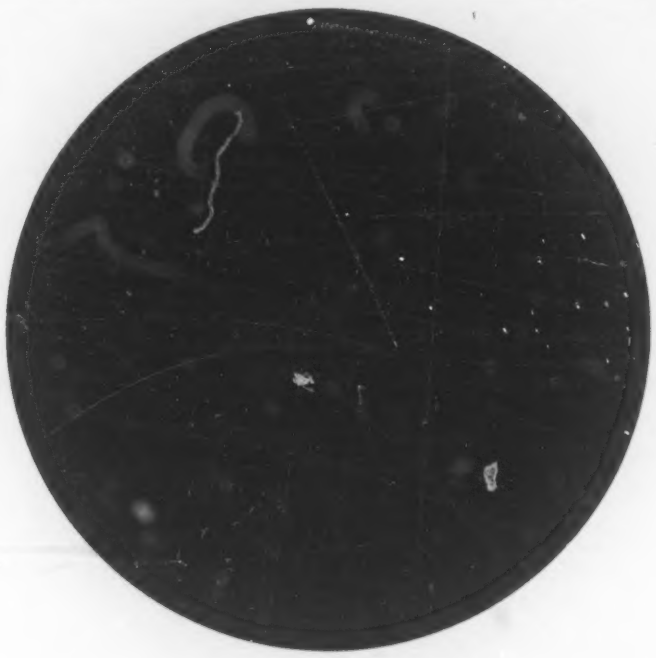
Duff & Phelps Invst. (Value)	9.0
Statistical Sciences (U.S.)	8.8
Merrill Lynch Asset (Value/int. rate)	8.6
Stein Roe & Farnham (Qual. gro.)	8.5
Daniel S. Kampel Assoc.	8.4
Wilson, Kemp & Assoc.	8.3
Portfolio Capital Mgmt.	8.0
Penteq (Stocks/cash)	8.0
Chicago Corp.	7.9
Mitchell Hutchins (Core growth)	7.8
Nat'l Asset Mgmt.	7.6
McCowan Assoc.	7.5

5-year returns

	%
Chancellor (Stockshift 200)	20.3
Leylegian Invst.	19.5
First Quadrant (Tactical returns)	19.1
Fox Asset Mgmt.	18.7
Statistical Sciences (U.S.)	18.6
Institutional Capital	18.5
Penteq (Stocks/cash)	17.9
TSA Capital (Strategic TAA)	17.2
Bankers Trust (TAA-active)	16.8
Beacon Capital (TAA)	16.8
Fayez Sarofim	16.4
Columbus Circle Investors	16.4
Turner Neill Invst.	16.3
Provident Invst. Counsel	16.3
Dolan Capital Mgmt.	16.2
Wagstaff, Lodefink & Assoc.	16.2
Fleet/Norstar Invst.	16.2

10-year returns

	%
First Quadrant (Tactical returns)	20.8
Kirr, Marbach	19.8
Penteq (Stocks/cash)	19.5
Tom Johnson Invst.	18.0
First Bank Milwaukee	17.8
Mellon Capital (3-way asset)	17.7
BRS Capital (TAA)	17.4
TSA Capital (Strategic TAA)	17.4
Chancellor (Assetshift 65)	17.2
Columbus Circle Investors	17.1
Caldwell & Orkin	17.1



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The Newspaper of Corporate and Institutional Investing

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AT DEADLINE

Pru Realty cuts back

Prudential Realty Group announced plans to reduce its 1,100-member staff by 10%. Some employees handling real estate transactions for Prudential Real Estate Investors — which manages about $5.5 billion in tax-exempt assets, including the $3.4 billion PRISA open-end fund — are likely to be affected by the staff cuts.

ULLICO chief named

Union leader Robert A. Georgine has been named chairman and chief executive officer of ULLICO Inc., the holding company for The Union Labor Life Insurance Co. He succeeds Daniel E. O'Sullivan, who died.

Chapter 11 fallout

Continental Airlines' Chapter 11 filing will cause the PBGC to file a $700 million claim against the airline's parent company and its subsidiaries. The claim represents the underfunding of Eastern Air Lines Inc.'s seven terminated pension plans.

Cash account allocated

Prentiss Properties Ltd. Inc. has hired AMR Investment Services Inc., Fort Worth, to manage a $5 million short-term cash account.

401(k) plan hires 3

Book Inventory Systems, Ann Arbor, Mich., has hired Oppenheimer & Co., Capital Research and Management Co. and Watkins & Ross, as the firm readies to begin a 401(k) plan Jan. 1. Oppenheimer was hired as consultant; Capital Research for three mutual funds options; and Watkins & Ross for bookkeeping.

INSIDE

Illustration by Greg Louden

Taking a closer look

At first glance, Rep. Dan Rostenkowski's proposal to tax the capital gains of foreigners seems like a good idea — but its ramifications could come back to haunt the United States. In Commentary, page 14.

IRS curbs health funding method

By Hillary Durgin

WASHINGTON — The Internal Revenue Service is putting the brakes on a new method to pre-fund retiree medical benefits.

Last week, the IRS said it would not accept further applications seeking approval on plans similar to one used by Procter & Gamble Co., Cincinnati, which uses a leveraged employee stock ownership plan to pre-fund retiree health accounts.

"We're going to put a hold on any determination letter applications until we can study this further," said Martin Slate, director of the employee plans division at the IRS.

The move by the IRS, which previously had issued a favorable determination letter to Procter & Gamble from a district office, is likely to restrain companies from immediately mimicking the approach, and ultimately could lead to restrictions on similar plans, lawyers and benefits consultants said. It is unclear whether the Procter & Gamble vehicle will be affected.

"It will make employers much more cautious in going forward if they do not have the protection of a determination letter," said A. Richard Susko, partner at Cleary, Gottlieb, Steen & Hamilton, a New York law firm. "And for those that do go forward, they will undoubtedly do so only with well-designed exit strategies."

Driving the IRS decision are revenue concerns associated with the ability to pre-fund retiree medical benefits on a tax-deductible basis, as well as some policy and technical questions about the plan's design, consultants said.

"There will be pressure on the (IRS) to look closely at the arrangement because of the revenue issue," said Harry J. Conaway, principal at William M. Mercer Inc., Washington. "If they find that some technical rule is violated, they're likely to say no one else could do it."

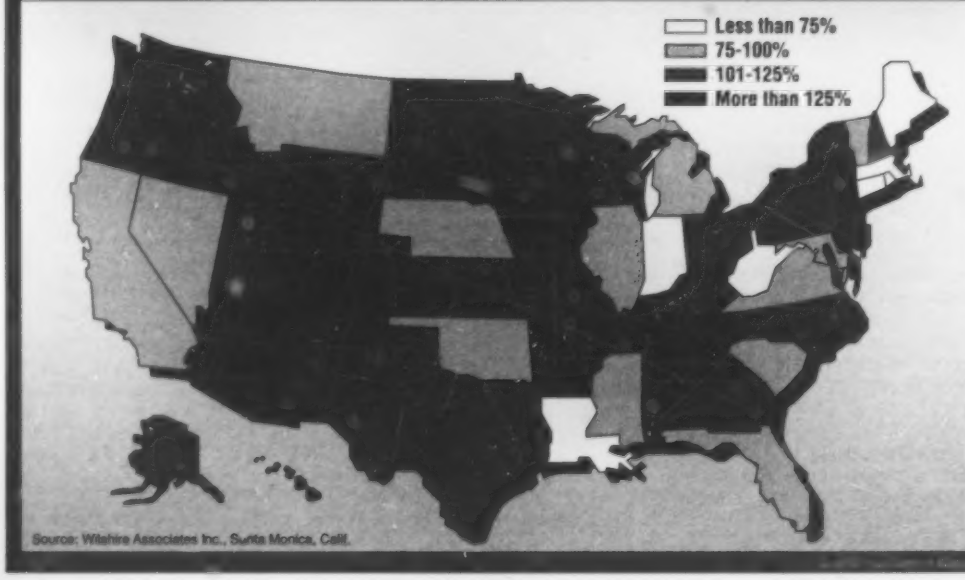
"We are looking at this from every angle," an IRS official said in an interview, referring to the combination of a leveraged ESOP and a 401(h) account, which is the basis for the Procter & Gamble design.

"What Congress has done in the

See **Health** *on page 46*

How healthy are the states' pension systems?

A recent survey tallied the funded status – assets as a percentage of the accumulated benefit obligation – of the aggregate pension system in each state and the District of Columbia. Valuation dates vary for the 82 funds comprising the survey.



Source: Wilshire Associates Inc., Santa Monica, Calif.

Public fund surpluses doubted

5 execs question Wilshire study's results and methodology

By Steve Hemmerick

Representatives from five state pension funds denied their systems have $35.4 billion in total surplus assets, as claimed in a new study of public pension funding levels.

The pension fund officials described the methodology as fuzzy and the actuarial assumptions as questionable, saying the spread between the interest rate and salary growth assumptions created the "surpluses."

Wilshire Associates Inc., the Santa Monica, Calif., consulting firm, did the study. It investigated the fiscal health of 82 state-sponsored retirement systems with $500 billion in total assets.

In completing the study, Wilshire consultants used new Governmental Accounting Standards Board reporting requirements.

Stephen Church, a Wilshire vice president and consultant who led the study, said to his surprise the study found most of the state retirement systems in good fiscal health.

But the Wilshire study also found some systems had huge surpluses. The study stated the New York (State) Public Employees Retirement System was the most overfunded, in dollar terms, with a $12.1 billion surplus. The New York State Teachers' Retirement System had a surplus of $9.4 billion, followed by the California Public Employees' Retirement System, $6.5 billion; the Teacher Retirement System of Texas, $3.9 billion; and the New Jersey Division of Investment, $3.5 billion.

The results came at a bad time for public funds in general, which are facing increased pressure from legislators to be used for social or budget-balancing means.

And they came at a particularly bad time for the New York systems. Gov. Mario M. Cuomo and the Legislature soon are expected to decide whether to change the accounting system for the state teachers fund from an aggregate cost method to a projected unit credit method.

When that change was implemented at the $36 billion employees system, state contributions dropped to almost nothing from 4% of payroll, except for some small local police and fire department contributions, according to

See **Wilshire study** *on page 45*

10 seek to revise tenders

By Marlene Givant Star

FMR Corp. and the Prudential Insurance Co. of America are leading a crusade by the biggest institutional investors in the country to reform SEC rules governing tender offers for bonds.

The move was prompted by the unprecedented leap in buybacks of deeply discounted bonds by highly leveraged companies — increasingly as an alternative to seeking bankruptcy protection. Bond tender offers are protected by only two of the 20 rules governing stock tender offers. And the very abuses that prompted the Securities and Exchange Commission stock tender rules are rampant in the bond area.

For instance, investors feel coerced into tendering their bonds in many situations today because if they don't, their bonds stand to plummet in value. And in several other respects, bondholders are not afforded the protections guaranteed to stock investors in tender offers.

Initially attacking what they consider the most egregious abuse, Boston-based FMR, the investment adviser to Fidelity Investments, and Newark-based Prudential have co-sponsored a petition signed by eight other institutions asking the SEC to require companies to seek bondholders consent to remove covenants before making a tender offer for the bonds.

Many high-yield issuers solicit bondholders consent to eliminate certain restrictive provisions on the debt. A successful consent solicitation can dramatically lower the value of the securities.

Other institutions signing the petition are The Equitable Life Assurance Society of the United States, New York, and seven Boston-based firms: John Hancock

See **Tenders** *on page 46*

NEWS DIGEST

Elizabeth Dole, in one of her last acts as secretary of labor, rejected a proposal by Housing and Urban Development Secretary Jack Kemp to allow pension assets to be used for affordable housing. Page 6.

The chief investment officers at 2 Texas pension funds are leaving their posts, but under very different scenarios. Page 4.

SPECIAL REPORT: EMPLOYEE BENEFITS

Flexible benefit plans are becoming a popular program with companies whose employees want more than traditional plans offer. Page 17.

Cash balance plans have found a quiet niche with several U.S. companies. Page 17.

Lump-sum distributions could be hit by a taxation double whammy through adoption of pension simplification legislation awaiting congressional action. Page 17.

FINANCING

Companies seeking to pre-fund retiree health benefits cannot follow Procter & Gamble's example, the Internal Revenue Service says. Page 1.

Northrop Corp. is being targeted "as one of the poorest performing" companies among the holdings of the California Public Employees' Retirement System. Page 2.

INTERNATIONAL

Opportunities to squeeze more revenue out of services could have more pension funds following Oregon's move to change custodians. Page 3.

An Australian union representing Westpac bank employees is suing the bank over the reversion of more than $250 million in surplus assets. Page 2.

Pension funds need higher foreign allocations to take advantage of expanding investment opportunities throughout the world. Page 47.

REAL ESTATE

The lag between property values and appraisals for pension fund property holdings in the Northeast could mean investors will be paying fees based on temporarily inflated numbers. Page 2.

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Scoreboard questionnaires out

Work has begun on *Pensions & Investments'* annual Money Manager Scoreboard. Questionnaires have been mailed and must be returned by Dec. 31 to be included in the rankings. If your investment management firm has not yet received a questionnaire, or if you have questions on it, contact Christine Philip, directory coordinator, at (312) 649-5217.

California targeting Northrop

By Marcia Parker

LOS ANGELES — Northrop Corp., one of the nation's top aerospace companies, is being targeted "as one of the poorest performing" companies among the more than 1,300 portfolio holdings of the $54 billion California Public Employees' Retirement System.

In addition, the California fund has filed shareholder proposals at ITT Corp. and W.R. Grace & Co. on executive compensation. The proposals call for the board of directors' committee on compensation to be composed solely of independent directors and to be provided with independent counsel. Both Grace and ITT are considered poor performers, particularly in returns to shareholders, although ITT has been improving in the past few years.

In a letter to Northrop Chief Executive Officer Kent Kresa, Dale Hanson, chief executive officer of the pension fund, said it would sponsor a shareholder proposal at the 1991 annual meeting asking that Northrop opt out of a section of Delaware's anti-takeover law, which is permitted if a majority of a company's shareholders vote to do so. The California pension fund holds 288,000 Northrop shares.

Mr. Hanson acknowledged that electing not to be governed by that section of the Delaware law will not necessarily lead to improved economic performance at Northrop. But he said it would result in "an improved corporate governance structure, one that will involve stockholders more directly in fundamental decisions that will effect the company's future economic performance."

He said the fund was submitting the proposal to meet the deadline for submission to the Securities and Exchange Commission. But he stressed the pension fund is eager to talk with management about enhancing shareholder value without the need to pursue the stockholder proposal mechanism.

The defense industry has been

See **Northrop** *on page 46*

Photo by Linda Sue Scott

Dale Hanson, chief executive of the California fund, wants Northrop to opt out of a portion of Delaware's anti-takeover law.

Selected real estate markets in the Northeast

Market	Class A office rental range: CBD	Class A office rental range: Non-CBD	Office vacancy rate: CBD	Office vacancy rate: Non-CBD
Hartford, Conn.	$22.50-35.00	$15.00-25.80	17.4%	19.8%
New Haven, Conn.	18.00-28.50	9.50-24.00	27.9	28.5
Suburban Maryland	na	16.50-35.00	na	18.1
Boston	18.00-55.00	10.00-29.00	16.0	21.2
Princeton, N.J.	na	16.50-29.00	na	15.3
Northern New Jersey	na	13.75-31.00	na	19.7
New York/Midtown	23.00-75.00	na	16.3	na
New York/Downtown	16.00-49.75	na	18.2	na
Philadelphia	16.01-33.00	10.20-31.75	11.1	20.2
Pittsburgh	15.00-28.50	8.00-24.00	17.4	18.5

Source: Cushman & Wakefield Inc., New York

Preparing for shock

Big writedowns coming for Northeast

By Steve Hemmerick

Appraisal reports on some of the estimated $17 billion in pension fund property holdings in the Northeast United States likely contain significantly overstated values, some real estate consultants and advisers believe.

The lag between current property values and the appraisals could mean pension investors will be paying managers fees based on temporarily inflated numbers.

Economic hard times in the region — particularly in cities like New York, Philadelphia and Boston — have caused realty values to fall.

"Some property types in some (Northeast) markets could be off easily 10% or significantly more than 10%. I would say office properties could be off as much as 20%," said Richard Barthell, a partner with Kenneth Leventhal & Co., Los Angeles.

In the New York region, Class A office properties have dropped in value 10% to 20%, agreed Stephen Bank, a senior vice president in the New York office of Cushman & Wakefield Inc. He said retail mall values also have been falling.

According to the Russell-NCREIF Property Index, advisers have written down properties in the Northeast 1.6% for the year ended June 30.

While real estate advisers have been taking some writedowns in the Northeast, they're not taking

See **Writedowns** *on page 43*

Theodore M. Leary says funds will be shocked by the drop.

Union sues over reversion

By Jennifer Fletcher

SYDNEY, Australia — A union representing bank employees is suing Westpac Banking Corp. and the trustees of its Employees Superannuation Fund over the reversion of more than $250 million of surplus assets from the fund to the bank earlier this year.

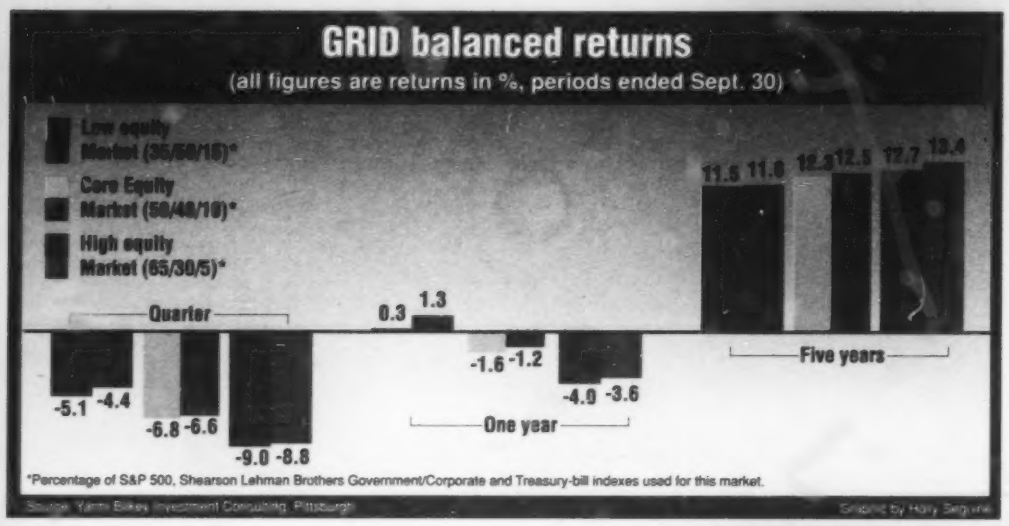
The Australian Bank Employees Union asserted in the suit that bank executives and the trustees had wrongfully amended the trust deed with the prime objective of allowing part of the approximately $770 million surplus to be paid to the bank.

The suit spotlights the emergence in Australia of an issue U.S. pension sponsors have been wrestling with for years.The Westpac case is the second litigation to emerge in Australia this year involving the distribution of pension fund surpluses. Shell Australia, which is trying to establish a new pension plan, also has entered a legal battle with employees over claims to $770 million of surplus pension assets from the old plan.

The bank employees union suit alleges the bank board of directors breached its fiduciary duties and committed fraud by amending the trust deed. Further, the union claims the fund's trustees failed to consider whether Westpac had any entitlement to the surplus and had acted in breach of their fiduciary duty to the beneficiaries of the plan.

The nationwide plan has more than 25,000 active members and is one of the largest defined benefit

See **Reversion** *on page 43*



REAL ESTATE

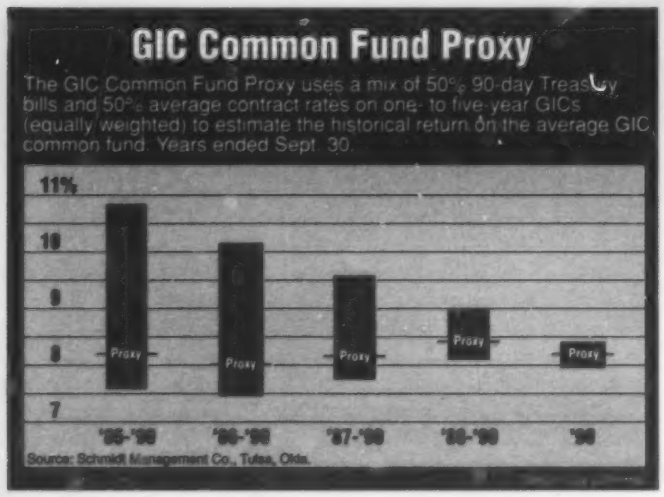
Income keeps performance positive

■ Institutional investors got a minuscule 0.61% total return from real estate in the third quarter, according to the Russell-NCREIF Property Index.

The index measures performance of 1,389 institutional properties valued at $20.5 billion. Third-quarter income gain from the properties reached 1.57%. But most of that gain was lost to depreciation, −0.96%.

For the first three quarters of 1990, the total return reached 2.97%, just less than 1% return per quarter. If the trend continues, the real estate return could be just less than 4% for calendar 1990, which some consultants believe would be a new low for institutional real estate. For the first three quarters, income returned 4.85%, but properties depreciated 1.82%.

For the year ended Sept. 30, the return reached 4.2%. Income for that period reached 6.56%, but depreciation, −2.25% for the year, took away about one-third of the return.



INVESTING

Wells Fargo retained as manager

■ The Federal Retirement Thrift Investment Board has retained Wells Fargo Institutional Trust Co., San Francisco, to manage the $7 billion fund's common stock and fixed-income index accounts.

The board's C Fund, with $156 million in assets, is invested in a stock-index fund that tracks the Standard & Poor's 500 Stock Index.

The $48 million F Fund will track the Shearson Lehman Brothers Aggregate Bond Index, a switch from the Shearson Lehman Brothers Government/Corporate Bond Index.

The change in benchmarks will enable the fund to have about 28% of its assets invested in higher-yielding mortgage-backed securities.

The assets will be invested in two commingled trust funds, which are managed by Wells Fargo Nikko Investment Advisors.

The government's Thrift Savings Plan, which is overseen by the board, has an additional $7 billion internally managed in government securities.

An expected high growth rate for the plan and a lifting of many investment restrictions — scheduled to be implemented in January — will spur significant growth in the assets of the C and F funds.

The three-year contracts, which include options to extend for an additional two years, take effect in January.

Hicks Waldron thinks boards should seek the help of outside advisers.

GOVERNANCE

These advisers know their way in boardrooms

■ Hicks Waldron, former chief executive officer of Avon Products Inc., New York, says boards of directors increasingly will turn to outside experts to help them on corporate governance issues. Who would be a better confidant and adviser than an experienced chief executive officer?

Mr. Waldron, who just joined Boardroom Consultants Inc., New York, as chairman, helped line up an impressive advisory board of former CEOs and chairmen to recruit directors and assist boards of directors in dealing with thorny governance issues.

The advisers are John Burlingame, former vice chairman and director of General Electric Corp.; Robert Frederick, former CEO of RCA Corp.; Robert Kilpatrick, former CEO of CIGNA Corp.; John Pietruski, former CEO of Sterling Drug Co.; Donald Seibert, former CEO of J.C. Penney & Co.; and William Souders, former CEO of Emery Air Freight Co.

Boards traditionally have sought legal counsel, but they haven't had a pool of seasoned executives on which to rely for advice. This new approach is being tried at a time when institutional investors are seeking more input into the nominating process and direct communication with boards.

PEOPLE

O'Sullivan spent career at ULLICO

D. O'Sullivan

■ Daniel E. O'Sullivan, president and chief executive officer of ULLICO Inc., died of a heart attack Nov. 25 while attending mass at St. Luke's Catholic Church.

Mr. O'Sullivan spent his entire career with ULLICO, the Washington-based holding company for Union Labor Life Insurance Co. and other related companies.

Mr. O'Sullivan oversaw Union Labor Life's relocation to Washington from New York City in 1983 and the reorganization of the company into ULLICO in 1987.

Mr. O'Sullivan also designed ULLICO's expansion in group health insurance, fiduciary liability insurance, pension fund investment and benefit administration. The union-owned company now has assets exceeding $2 billion.

Mr. O'Sullivan joined Union Labor Life as a clerk in 1950, was named president in 1979 and chief executive officer in 1984. A successor has not yet been named.

INTERNATIONAL

Fund targets Spanish companies

■ Betting on the future growth of Spain's small to midsize companies, a closed-end private placement fund has raised $90 million from institutional investors on three continents.

The fund, believed to be the largest of its kind, is a Dutch investment company jointly sponsored by Asesores Bursatiles, a Madrid investment bank, and American International Group, an insurance company. It is AIG's first investment fund geared to institutions.

Investors are mainly pension fund managers and insurance companies from Europe, the Far East and the United States.

Besides this fund — Asesores Bursatiles Capital Fund N.V. — only three other funds invest in unlisted Spanish companies, even though the companies dominate the economy. Ninety-four percent of Spain's companies are small to midsize with less than 200 employees, according to A.B. Colayco, vice president-foreign investments at AIG and a member of the fund's board.

The fund, denominated in Dutch guilders, will make predominantly straight equity investments in private companies through minority stakes. It will seek to provide development and expansion capital to proven companies rather than early stage venture capital.

AIG is a "significant" investor in the fund, although Mr. Colayco declined to be more specific.

Some of the fund's 14 investors are on its board and investors can provide additional equity to companies beyond the fund's stake.

CUSTODY

U.S. bank opens a branch office in City of Lights

The Bank of New York has added Paris to its global custody locales.

■ The Bank of New York's global custody operation is becoming more global.

The bank, which already had global custody administrative offices in New York, London and Tokyo, has expanded them to include Frankfurt, Milan, Paris and Madrid — sites where the Bank of New York already has a banking presence.

The point is to service global custody customers locally in those countries, according to a bank spokesman.

And this expansion may not end in Europe; the bank is "looking at the possibility of having additional custody offices in Asia," he said.

The global custody expansion follows the implementation of the bank's global securities movement and control system and also, earlier this year, the new multicurrency accounting system. "Between the two systems, we have $20 million-plus investments" that will be used in the bank's global custody offices worldwide, said the spokesman.

No new employees are being hired for the European global custody administrative offices. Existing bank employees are being reassigned to global custody but will remain in their current offices.

Giving workers a choice

Flexible benefit plans put employees at their own helm

By Curtis Vosti

Flexible benefit plans are growing in popularity and flexibility as they strive to meet the needs of a changing work force and cost constraints of employers.

The plans, also known as cafeteria plans because they offer employees a menu of benefit options, are expected to resume growth rates after they leveled off in 1989.

"Cafeteria plans are hot. People are instituting them left and right," said Bob Barry, a managing director with William M. Mercer Inc., Boston, which advises 300 clients on how to design such plans.

"Our work force is changing. The old standard benefit program isn't what everyone wants," he said. "Employees are getting a choice to maximize their benefits."

This year, Mercer helped Massachusetts Mutual Life Insurance Co., Springfield, Mass., establish its flexible benefit program for 5,400 of its employees nationwide.

"It helps people become more aware of cost of benefits," said Peter Feige, vice president of employee benefits at Massachusetts Mutual. "It lets them decide where they can best spend the money. They become active participants, and we're seeing people being very sophisticated in their choices."

With the flexible benefit plans, Mass Mutual was able to increase the number of its health, dental and disability plans, and offer for the first time vision coverage, dependent care and health spending accounts — all at the same cost as the old, standard plan, Mr. Feige said.

With cafeteria plans, a company assigns a set dollar value among various benefit options and gives its employees the opportunity to shop for the best combinations among health care and dental programs, life insurance and other benefits.

Employees often have the option of waiving some coverage in return for taxable cash; according to a Hewitt Associates survey of companies with more than 250 employees that have flex plans, 54% offer this option. Adding vacation time or reducing it in return for cash or other benefits also can be an option.

Cost containment prompted implementation of the flex plans for 58% of the firms, according to the Hewitt survey. Another major reason is to better meet the diverse needs of the work force.

"We saw a need for moving away from the typical package that was designed about 25 years ago," Mr. Feige said. "It opens opportunities for what (employees') needs really are, which change throughout the course of their lives."

According to a 1989 survey by A. Foster Higgins & Co. Inc., Princeton, N.J., of companies with more than 1,000 employees, 79% of the flex plans offered dental care; 78% offered life insurance; 67% offered accidental death and dismemberment; 55% offered long-term disability; 23% offered short-term disability; 29% offered a 401(k) option; 22% offered vision care; 19% offered vacation buying; and 14% offered vacation selling.

Flexible spending accounts, which allow the employee to contribute pre-tax dollars to cover out-of pocket health and/or dependent care costs not otherwise covered, were offered in 78% of the plans.

While the Internal Revenue Service set a $5,000 limit on the amount that can be contributed to dependent care and health accounts per year, employers can set lower limits. The Hewitt survey indicated the average contributions were $2,539 for the dependent care and $573 for the health accounts in 1989.

Proposed regulations in the past two years from the IRS and the repeal of a non-discrimination testing requirement have removed the risks that had delayed implementation of plans by many firms, according to George Faulkner, a consultant with A. Foster Higgins. "In the mid-1980s, there was a lot of uncertainty about Section 125" of the IRS Code, which authorizes flexible benefits, he said. "Under the new rulings, a lot of the uncertainty was resolved."

According to Tim Parsons, an attorney in Denver who helps set up flex plans, the plans reflect cost awareness measures also taking place in the pension field. He spoke recently on flexible benefit plans at the 24th annual Employee Benefits Conference in Hawaii.

"It begins to move away from defined benefit approaches to more of a defined contribution approach," he said. "A company can say to its employees, 'This is how much I can afford for your benefits, and if you want more, you have to pay for it.' "

Mr. Barry said growth in the use of flex plans is spreading from the larger companies to midsized ones, especially because administrative costs have dropped. Five years ago, he said, it cost about $100,000 or more to set up the complex record-keeping system. Now it is down to about $50,000, and with personal computer-based systems for smaller companies, the price can go as low as $20,000.

This lower cost will help increase the impetus for plans, according to Mr. Faulkner. But, he said, the additional possibilities for coverage in areas such as long-term care, funding of retiree health costs and dependent spending accounts, will reflect a changing impetus for establishing the plans.

"In those newer choices, clearly demographics is the driving force, not cost containment," Mr. Faulkner said. ■

Massachusetts Mutual Life was able to offer more with a flexible benefits program established this year for its 5,400 employees.

Cash balance plan settling into niche

By Fred Williams

Cash balance pension plans appear to be gaining acceptance as employee attitudes toward retirement planning evolve.

More than 100 employers have established cash balance plans since the idea was originated by the Fort Lee, N.J., consulting firm of Kwasha Lipton in July 1985 as an alternative to defined benefit plans. Cash balance plans include features of defined contribution plans — individual account statements and portability — but technically are a form of defined benefit plan, with the company pre-funding benefits based on pay and service.

While the response to cash balance plans has not been overwhelming, companies using the approach come from various industries and range in size from large to relatively small.

The first company to adopt cash balance was BankAmerica Corp. in 1985. Since then, other companies such as Chase Manhattan Corp., Continental Can Inc., Equitable Life Assurance Society of the United States, Hershey Foods Corp., Xerox Co., General Signal Corp., Georgia-Pacific Corp. and Borden Inc. have followed suit.

The reason for adopting cash balance usually is not to save money, because the costs depend on the level of benefits the company wishes to provide. One of the most commonly stated reasons is to improve employee relations by providing a plan with individual account statements that are easily understood by employees. Another reason is to reduce or cut back on expenses or benefit packages.

There is "no real financial or economic benefits to the employer" by adopting a cash balance plan, said Vicky Slomiany, a consultant with The Wyatt Co., Minneapolis. "There's no way to say they are cheaper or less expensive."

Pension and employee benefit executives interviewed agreed cost control was not the motivating factor for adopting cash balance.

Stephen V. O'Neill, employee benefits director at Cooper Industries Inc., Houston, said

See **Cash** *on page 40*

Hard times for tax breaks

Advantages lose in simplification

By Hillary Durgin

WASHINGTON — Lump-sum distributions of retirement assets might lose some key tax advantages under a pension simplification bill awaiting congressional action next year.

While the proposed legislation would simplify distribution rules, it also might take two major tax benefits from participants — especially senior management, which also decides how benefit plans are designed.

One measure lawmakers would like to repeal is called five-year forward income averaging: it allows retirees who receive their retirement savings in a lump sum to calculate taxes as if they received the payment over five years rather than all at once.

In addition, the Treasury Department wants to repeal a measure that permits employees who receive a distribution containing company stock, to defer paying taxes on any appreciation of that stock until they sell it.

With the proliferation of employee stock ownership plans and other defined contribution plans, this provision might have a substantial effect on employees taking distributions from any plan that is either totally or partially invested in company stock.

Employers might be unwilling to give up these tax breaks in exchange for rules that would encourage participants to roll over greater portions of their retirement income, said Gerald Uslander, principal with William M. Mercer Inc., Washington.

"If, coupled with (repeal of five-year forward averaging), the tax deferral on net unrealized appreciation were repealed, those two things would really cause some serious concern for big companies," Mr. Uslander said.

The combination of repealing rules on net unrealized appreciation and special forward averaging would have a significant impact on senior management who receive the richest benefits from these breaks because of the heftiness of their distributions.

Some employers, who support the concept of restricting lump-sum distributions to encourage saving for retirement, are concerned that repeal of the special averaging rules could instead discourage such savings. "We would have a concern if it reduced retirement savings," said Ronald D. Hovis, director-benefits, Southwestern Bell Corp., St. Louis. "The majority of the withdrawals from our savings plan are lump withdrawals," he added.

Nevertheless, some consultants and Senate staff say the popular provisions could face elimination in Congress' next session, when lawmakers renew efforts to simplify pension plan rules.

"If there is a simplification effort that goes through the Congress, then repeal of five-year forward averaging is a good candidate for enactment," said Frank McArdle, manager of Hewitt Associates' Washington office.

Lawmakers who introduced legislation last summer that would repeal these rules have argued that under current law, the provisions are complex and costly to the government.

Last year, an estimated 650,000 to 750,000 participants received

See **Taxes** *on page 40*

As part of its report on employee benefit issues and trends, *Pensions & Investments* has compiled a listing of defined contribution plan administrators and software providers. This directory begins on the following pages. All information in the profiles is ©1990 Crain Communications Inc. Reproduction without permission is prohibited.

SERVICES

Ameritas Life Insurance
P.O. Box 81889, Lincoln, Neb. 68501; (402) 467-1122

Clients	250
Average plan size (participants)	45
Median plan size (participants)	10
Administrative services staff	20

Ameritas Life Insurance Corp., a life insurance company, has record-keeping services which can handle nine contribution categories; 64 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participant.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; 800 numbers for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Other services include proposal and plan design, prototype documents; compliance testing; and government reporting.

Software is written internally and purchased from an outside vendor.

Fees are calculated based on plan type, number of employees and number of investments.

Key executives overseeing defined contribution plan administrative services are are Benedict J. Mattem and Roxann Brennfoerder.

Ameritrust Texas
1201 Elm St., Dallas, Texas 75270; (214) 712-3460

Clients	750
Administrative services staff	57

Ameritrust Texas is a bank/trust company.

Among its trustee services, it offers trade-date and settlement date for valuation of assets; multiple sources for pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; weekly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsors and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Other services include acting as trustee, agent, or custodian for corporations sponsoring a broad array of retirement plans and offers master trust, master custody and securities lending services.

Software is purchased from an outside vendor.

Service offices are in Austin, Dallas, Houston, Waco, El Paso, Wichita Falls, Sherman, Corpus Christi, San Antonio and Fort Worth.

Fees are calculated based on a percentage of assets.

Key executives overseeing defined contribution plan administrative services are Frank Dunlap and Susan D. Goudie.

AmSouth Bank
P.O. Box 11426, Birmingham, Ala. 35242; (205) 326-5512

Clients	1200
Average plan size (participants)	300
Median plan size (participants)	500
Administrative services staff	30

AmSouth Bank is a bank.

Among its trustee services, it offers settlement date accounting for valuation of assets; multiple sources for securities pricing; and daily transactions reports.

Its record-keeping services can handle 14 contribution categories; 19 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Software is written internally and purchased from an outside vendor.

Fees are based on a standard pricing schedule.

Key executives overseeing defined contribution plan administrative services are Wally Womack and Lynn Cushing.

Arnold & Co.
1301 W. Long Lake Road, Troy, Mich. 48098-6348; (313) 641-8686

Clients	80
Average plan size (participants)	100
Median plan size (participants)	225
Administrative services staff	12

Arnold & Co. is an employee benefit consulting firm and a third party administrator.

Its record-keeping services can handle 12 contribution categories; 99 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; an 800 number for participant balance inquiries; and coordination with GIC carriers.

Other services include drafting of employee communication workbooks and enrollment seminar material.

Software is purchased from an outside vendor.

Fees are based on number of plan investment options; frequency of plan change; and timing and frequency of plan distributions.

Key executive overseeing defined contribution plan administrative services is Craig C. Arnold.

BancOklahoma Trust Co.
P.O. Box 2300, Tulsa, Okla. 74192; (918) 588-6724

Clients	300
Average plan size (participants)	150
Median plan size (participants)	50
Administrative services staff	52

BancOklahoma Trust Co. is a bank/trust company.

Among its trustee services, it offers full accrual trade-date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record keeping services can handle 10 contribution categories; 30 investment selections; transfers and reallocations among investment funds; fed-

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eral and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Other services include investment management, plan administration, proprietary mutual funds, master trustee, pooled GIC funds, discount brokerage, tax deferred annuities, IRAs, Keoghs, 403(b), 457, 501(c)(9), ESOP plan services, prototype plans and custodial services.

Software is purchased from an outside vendor.

Service offices are in Tulsa and Oklahoma City.

Fees are calculated on the number of participants, number of transactions, special services and base and market value fees where appropriate.

Key executives overseeing defined contribution plan administrative services are Phillip L. Owings and Ellen Helmey.

Bank of America National Trust & Savings Association

1 S. Van Ness Ave., San Francisco, Calif. 94103; (415) 241-7567

Average plan size (participants)	200
Median plan size (participants)	112
Administrative services staff	50

Bank of America National Trust & Savings Association is a bank/trust company.

Among its trustee services, it offers settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include commingled investment funds, a selection of prototype plans including 401(k), profit sharing, and money purchase plans and employee communications and enrollment packages.

Software is purchased from an outside vendor.

Service offices are in San Francisco and Los Angeles.

Fees are calculated on the market value of the account and the services provided (bundled or unbundled).

Key executives overseeing defined contribution plan administrative services are Warren L. Metzger, John S. Marino, Richard A. Rabis and Lauren D. Upson.

Bank of Boston

P.O. Box 1882/MS 45-01-11, Boston, Mass. 02109; (617) 575-2151

Clients	500
Average plan size (participants)	150
Median plan size (participants)	400
Administrative services staff	50

Bank of Boston is a bank.

Among its trustee services, it offers trade-date and settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Administrative services provide coordination of trust and record-keeping activities; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include specialized matrix reporting for 401(k)s.

Trust software is purchased from an outside vendor.

Fees are calculated on market value, transaction charges and portfolio charges.

Key executives overseeing defined contribution plan administrative services are Steve MacQuarrie and John Su[illegible]

Bankers Trust Co.

665 Locust, Des Moines, Iowa 50309; (515) 245-2800

Clients	150
Average plan size (participants)	100
Median plan size (participants)	85
Administrative services staff	[illegible]

Bankers Trust Co. is a bank.

Among its trustee services, it offers settlement-date for valuation of assets; multiple sources for securities pricing and daily transactions reports.

Its record-keeping services can handle seven contribution categories and 10 investment selections; quarterly transfers and reallocations among investment funds; federal tax withholding; loan provisions; and comprehensive reports to plan sponsor and its participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; and coordination with GIC carriers.

Other services include full range of investment services and consulting and testing services for defined contribution plans.

Software is purchased from an outside vendor.

Fees are based on market value and number of participants.

Key executives overseeing defined contribution plan administrative services is William H. Feller.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017; (212) 850-2051

Clients	245
Average plan size (participants)	10,300
Median plan size (participants)	2,576
Administrative services staff	530

Bankers Trust Co. is a bank/trust company.

Among its trustee services, it offers trade-date and settlement date accounting for valuation of assets and average cost or tax-lot accounting for either accounting basis; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 40 contribution categories; 99 investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsors and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Other services include investment management; automatic sweep access to multiple cash management funds; brokerage services; investment consulting and analytics; on-line access to global trust accounting and performance; 800-number voice response system for inquiries and transactions; staffed service center for inquiries and transactions; and defined contribution plan design consulting services.

Software is written internally.

Service offices are in New York, Jersey City, Los Angeles and Houston.

Fees are based on services and size and complexity of each plan.

The key executive overseeing defined contribution plan administrative services is Allan Martin.

Bank IV

P.O. Box 4, Wichita, Kan. 67201-0004; (316) 261-4555

Clients	403
Average plan size (participants)	100
Administrative services staff	31

Bank IV is a bank.

Among its trustee services, it offers trade-date, settlement date and tax-lot accounting; multiple sources for securities pricing; daily transaction reports; and securities lending support (sub-contracted).

Its record-keeping services can handle as many contribution categories as needed; six investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsors and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include enrollment meetings and enrollment/change forms for participants.

Software is purchased from an outside vendor.

Service offices are in Wichita, Topeka and Kansas City. Service is also available through nine other Bank IV affiliate trust departments.

Fees are based on market value of accounts and statement frequency.

Key executives overseeing defined contribution plan administrative services are Carroll D. Lawson and Patrick C. Woodward.

New horizons for defined contribution plans: April 1.

Bank One Dayton

40 N. Main St., Dayton, Ohio 45401; (513) 449-8659

Clients	275
Average plan size (participants)	75
Median plan size (participants)	100
Administrative services staff	6

Bank One Dayton is a bank.

Among its trustee services, it offers trade-date accounting; multiple sources for securities pricing; and daily transactions reports.

Its record keeping services can handle four contribution categories; four investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; 800 number for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Software is purchased from an outside vendor.

Fees are based on assets, number of participants and number of allocations per year.

The key executive overseeing defined contribu-

tion plan administrative services is Donald B. Middendorf.

Bank One Trust & Asset Management Group

111 Monument Circle, Indianapolis, Ind. 46277; (317) 321-8151

Clients	400
Administrative services staff	8

Bank One Trust & Asset Management Group is a bank/trust company.

Among its trustee services, it offers trade-date and settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports and securities lending support.

Its record keeping services can handle four contribution categories; 10 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsors and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Software is purchased from an outside vendor.

Services offices are in Indianapolis, Bloomington, Crawfordsville, Franklin, Lafayette, Marion, Merrillville, New Castle, Plainfield and Richmond.

Fees are calculated based on the market value of accounts; service charges are done on a per transaction basis.

Key executives overseeing defined contribution plan administrative services are William R. Murphy and Karen L. Chambers.

Bank One Trust Co.

100 E. Broad St., Columbus, Ohio 43271-0193; (614) 248-5724

Average plan size (participants)	100
Administrative services staff	8

Bank One Trust Co. is a bank/trust company.

Among its trustee services, it offers settlement date accounting for valuation of assets; multiple sources for securities pricing; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 10 investment selections; transfers per trust agreement and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to participants and plan sponsors.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; and proxy voting and tabulation services.

Other services include prototype defined contribution plans; investment management services; and custodial services.

Fees are based on market value of the plan.

The key executive overseeing defined contribution plan administrative is H. Herbert Schupp.

BayBanks Inc.

7 New England Executive Park, Burlington, Mass. 06803; (617) 243-3591

Clients	200
Average plan size (participants)	800
Median plan size (participants)	100
Administrative services staff	24

BayBanks Inc. is a bank.

Among its trustee services, it offers settlement date accounting for valuation of assets; multiple sources for securities pricing; and daily transactions reports.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include defined benefit plans, pension payment services, investment management and Keogh plan administration.

Software is purchased from an outside vendor.

Service offices are in Burlington and Springfield.

Fees are based on market value of assets and record-keeping services.

The key executive overseeing defined contribution plan administrative services is Elaine D. Mahoney.

RA Bench

1200 Fifth Ave., Suite 1200, Seattle, Wash. 98101-9810; (206) 682-7803

Clients	100
Average plan size (participants)	400
Median plan size (participants)	100
Administrative services staff	10

RA Bench is a third-party administrator.

Its record-keeping services can handle nine contribution categories and unlimited investment selections; quarterly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Other services include flexible benefit administration - Section 125, Section 457 and deferred compensation plans.

Software is purchased from an outside vendor.

Fees are based on number of investments offered and frequency of participant statements.

The key executive overseeing defined contribution plan administrative services is Rodney Bench.

Benefit Concepts Inc. of Rhode Island

396 Wampanoag Trail, E. Providence, R.I. 02915; (401) 438-7100

Clients	250
Average plan size (participants)	100
Median plan size (participants)	75
Administrative services staff	10

Benefit Concepts Inc. of Rhode Island is a employee benefit consulting firm.

Its record-keeping services can handle an unlimited number of contribution categories and investment selections; per plan transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; and coordination with GIC carriers.

Other services include plan design document preparation, communication, COBRA and flexible benefit plan administration.

Service offices are in Providence, Hartford, Boston and New York.

Software is purchased from an outside vendor.

Fees are calculated on a flat fee and participant fee basis based upon plan type and design.

Key executives overseeing defined contribution plan administrative services are Margaret Lemieux and F. Jay Hoder.

Boatmen's Trust Co.

100 N. Broadway, St. Louis, Mo. 63102; (314) 466-3800

Clients	187
Average plan size (participants)	602
Median plan size (participants)	115
Administrative services staff	87

Boatmen's Trust Co. is a bank/trust company.

Among its trustee services, it offers trade-date and settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record keeping services can handle 10 contribution categories; 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participant's balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; 800 number for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Other services include plan development and installation; employee communications, discrimination testing, benefit payments; performance measurement; and securities lending and investment management.

Software is purchased from an outside vendor.

Service offices are in St. Louis and Kansas City, Mo.

Fees are based on market value, number of participants and special services.

Key executives overseeing defined contribution plan administrative services are Rollin Woltjen, Lyle Brizendine, Steven Faries, Michael Patton, Gregory Reynders, Anthony Brown and Christopher Drazen.

Boston Safe Deposit and Trust Co.

1 Boston Place, Boston, Mass. 02108; (617) 722-7000

Clients	19
Average plan size (participants)	2,500
Median plan size (participants)	2,000
Administrative services staff	25

Boston Safe Deposit and Trust Co. is a bank/trust company.

Among its trustee services, it offers trade-date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsors and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Other services include 401(k) discrimination testing, benefit disbursement services and investment management services.

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T. Rowe Price
100 E. Pratt Street, Baltimore, MD 21202

T.RowePrice

Software is purchased from an outside vendor.

Service offices are in Boston, New York, San Francisco, Newport Beach, Los Angeles, Palo Alto and London.

Fees are calculated based on number of participants and frequency of valuation.

The key executive overseeing defined contribution plan administrative services is Robert Uriano.

C&S/Sovran Trust Co. Inc.

33 North Ave., Suite 900, Atlanta, Ga. 30308; (404) 397-3101

Clients	2,317
Average plan size (participants)	96
Median plan size (participants)	65
Administrative services staff	136

C&S/Sovran Trust Co. Inc. is a bank/trust company.

Among its trustee services, it offers trade-date and settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 99 contribution categories; 99 investment selections; monthly monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsors and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; and coordination with GIC carriers.

Other services include employee communications/benefits consulting, portfolio evaluation services, master trust services and investment management services.

Software is purchased from an outside vendor.

Service offices are in Atlanta, Bethesda, Columbia, Nashville, Norfolk, Richmond, Roanoke, St. Petersburg and Washington.

Fees are based on asset value and number of participants.

Key executives overseeing defined contribution plan administrative services are John H. Yost, Andrew L. Robinson, Bob O'Brien, Virgil Satchwell, Barry Babish, Frank Bulloch and Wilson Ellis.

Chemical Bank

55 Water St., New York, N.Y. 10041; (212) 820-5137

Clients	112
Average plan size (participants)	800
Administrative services staff	7

Chemical Bank is a bank.

Among its trustee services, it offers trade-date, settlement date and tax-lot accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Administrative services provide coordination of trust and record-keeping activities; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services provided are master trust, master custody, global custody, securities lending and directed trust and on-line access to portfolios.

Software is written internally.

Fees are based on transactions, reporting requirements and relationship complexity.

The key executive overseeing defined contribution plan administrative services is David Hutton.

Chernoff Diamond & Co.

1157 Willis Ave., Albertson, N.Y. 11507; (516) 484-2828

Clients	250
Average plan size (participants)	100
Median plan size (participants)	100
Administrative services staff	9

Chernoff Diamond & Co. is an employee benefit consulting firm.

Its record-keeping services can handle 28 contribution categories; 28 investment selections; quarterly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsors and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; and coordination with GIC carriers.

Other services include actuarial services, defined benefit plan administration, life and health insurance services.

Software is purchased from an outside vendor.

Fees are based on a combination of a fee schedule and hourly rates.

Key executives overseeing defined contribution plan administrative services are Benjamin Feller and David Yackel.

Chicago Title & Trust

111 W. Washington, Chicago, Ill. 60602; (312) 630-3414

Clients	211
Average plan size (participants)	196
Median plan size (participants)	103
Administrative services staff	50

Chicago Title & Trust is a bank/trust company.

Among its trustee services, it offers trade-date accounting for valuation of assets and multiple sources for securities pricing.

Its record-keeping services can handle 10 contribution categories; 10 investment selections; monthly transfers and reallocations among investment funds; federal tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include investment management, plan design and communications.

Software is purchased from an outside vendor.

Fees are based on assets and record-keeping services.

Key executives overseeing defined contribution plan administrative services are Dan Joyce and Andy Mayo.

Citibank

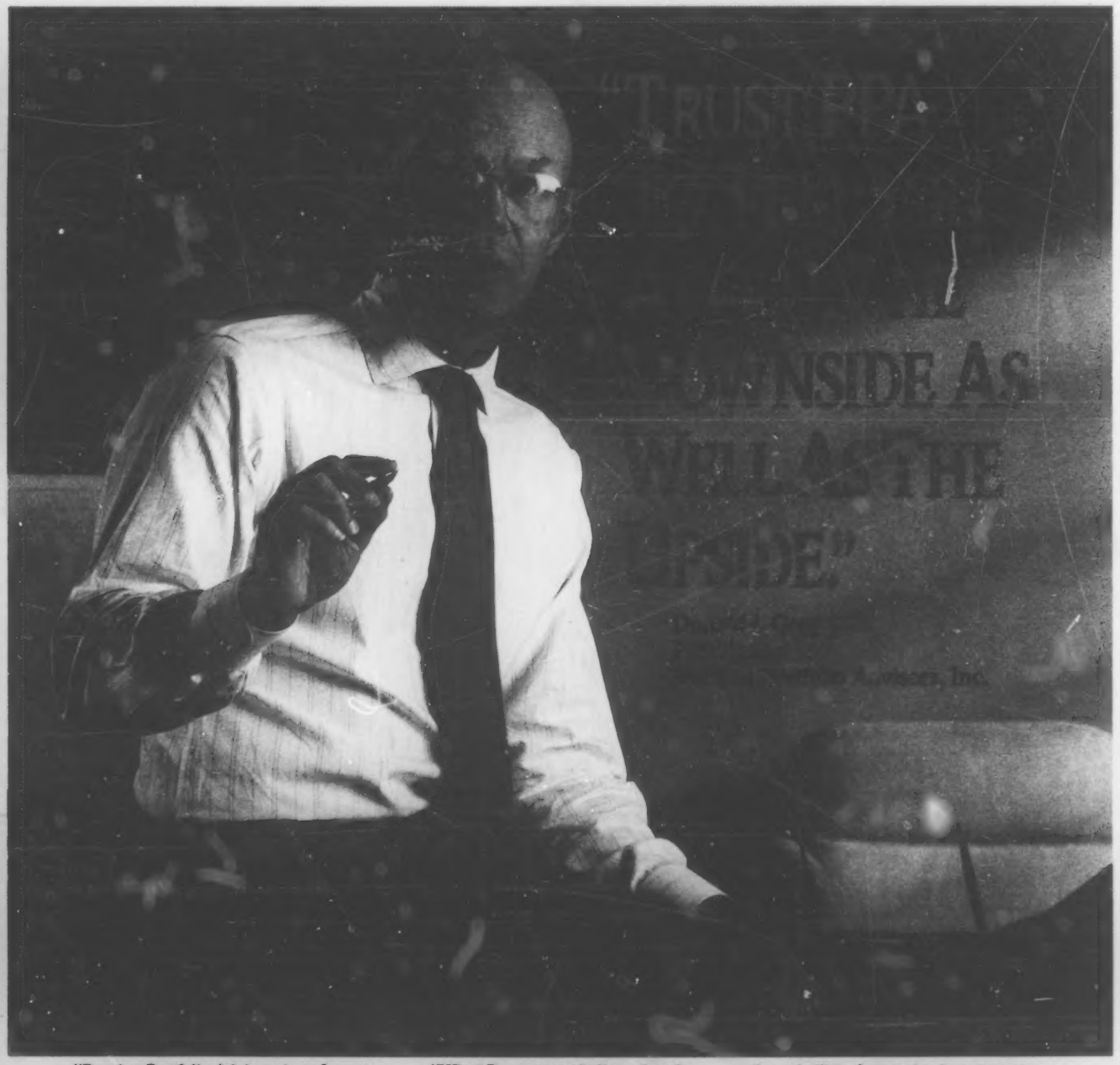
1 Court Square, Long Island City, N.Y. 11120; (718) 248-4347

Clients	96
Average plan size (participants)	4,236
Median plan size (participants)	700
Administrative services staff	22

Citibank is a bank.

Among its trustee services, it offers trade-date, settlement date and tax-lot accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle unlimited contribution categories and investment selections;



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daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; 800 number for participant balance inquiries; and coordination with GIC carriers.

Software is purchased from an outside vendor.

Service offices are in New York and San Francisco.

Record-keeping fees are based on frequency of valuations, number of participants and plan complexity. Trustee fees are based on assets and number of portfolios.

Key executives overseeing defined contribution plan administrative services are Raymond Parodi, Denis Farrell, Helen Connealy, John McCoy and Amelia Soto.

Comerica Bank
211 W. Fort St., Detroit, Mich. 48275-1035; (313) 222-5056

Clients	400
Average plan size (participants)	350
Median plan size (participants)	420
Administrative services staff	45

Comerica Bank is a bank.

Among its trustee services, it offers settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; monthly/quarterly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include participant communication program; and communication to plan sponsor quarterly on-line capability.

Software is purchased from an outside vendor.

Fees are based on market value of assets and number of participants, funds and valuations.

The key executive overseeing defined contribution plan administrative services is John B. Barth.

Commerce Bank of Kansas City
922 Walnut, Kansas City, Mo. 64141; (816) 234-2506

Clients	365
Average plan size (participants)	50
Median plan size (participants)	65
Administrative services staff	35

Commerce Bank of Kansas City is a bank.

Among its trustee services, it offers settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports and securities lending support.

Its record-keeping services can handle unlimited contribution categories and investment selections; transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and to participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; and an 800 number for participant transactions.

Other services include asset management and custody.

Software is purchased from an outside vendor.

Fees are on basis of market value and number of participants.

Key executives overseeing defined contribution plan administrative services are Mike Marlow and John Owen.

Connecticut Bank & Trust
1 Constitution Plaza, Hartford, Conn. 06115; (203) 224-4876

Clients	230
Average plan size (participants)	300
Median plan size (participants)	250
Administrative services staff	50

Connecticut Bank & Trust Co. is a bank/trust company.

Among its trustee services, it offers settlement date accounting for valuation of assets; multiple sources for securities reports; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; proxy voting and tabulation services; and coordination with GIC carriers.

Other services provided are discrimination testing, disbursement services, loan processing and investment performance measurement.

Software is purchased from an outside vendor.

Service offices are in Hartford and Stamford.

Fees are based on the number of participants, assets and services provided.

The key executive overseeing defined contribution plan administrative services is Thomas Fenton.

Continental Bank
231 S. LaSalle St., Chicago, Ill. 60697; (312) 828-3560

Clients	126
Administrative services staff	15

Continental Bank is a bank.

Among its trustee services, it offers trade-date, settlement date and tax-lot accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Administrative services provide filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include GIC fund, automated sweep to STIF, multiple plan accounting, benefit payments, annual ERISA reporting, comparative performance measurement and global custody and reporting.

Software is written internally and purchased from an outside vendor.

Fees are based on the market value of assets, transactions and services required.

Key executives overseeing defined contribution plan administrative services are James J. Nemec and Patrick C. Lynch.

Dyatron Corp.
210 Automation Way, Birmingham, Ala. 35210; (205) 956-7700

Clients	300
Average plan size (participants)	2,000
Median plan size (participants)	1,500
Administrative services staff	50

Dyatron Corp. is a third-party administrator.

Its record-keeping services can handle 35 contribution categories; unlimited investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; 800 numbers for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Other services include consulting services, disbursements and voice response systems.

Software is written internally.

Fees are based on valuation frequency plus ancillary services.

Key executives overseeing defined contribution plan administrative services are Philip M. Woolweaver and Ray Davis.

Fidelity Institutional Retirement Services
82 Devonshire St., Boston, Mass. 02109; (617) 570-7000

Clients	2,000
Average plan size (participants)	1,300
Median plan size (participants)	600
Administrative services staff	300

Fidelity Institutional Retirement Services Co. is a mutual fund company.

Among its trustee services, it offers trade-date accounting for valuation of assets; multiple sources for securities pricing; and daily transactions reports upon request.

Its record-keeping services can handle nine contribution categories; 150 investment selections; transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsors and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and participant transactions; and coordination with GIC carriers.

Other services include provide daily valuation, telephone exchange, broad investment services, full service communication program and trustee services.

Software is written internally.

Service offices are in Boston, Cincinnati and Dallas.

Fees are based on the number of participants and plan profile.

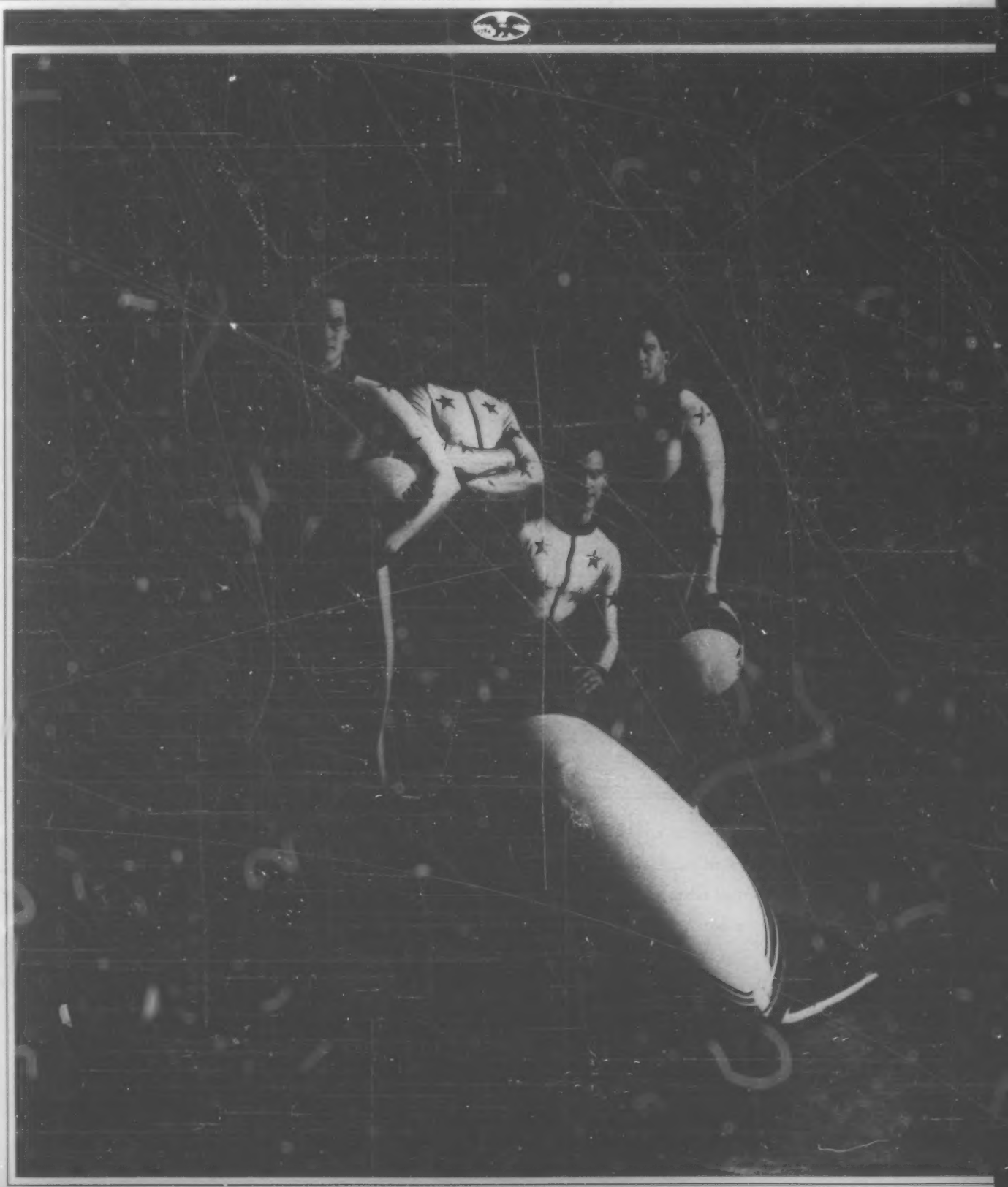
Key executives overseeing defined contribution plan administrative services are Bob Reynolds, Mike Minac, Peter Smail and James Bowlers.

Fidelity — Tax-Exempt Services
82 Devonshire St., Boston, Mass. 02109; (617) 570-7000

Clients	500
Average plan size (participants)	240
Median plan size (participants)	200
Administrative services staff	120

Fidelity — Tax-Exempt Services is a mutual fund company.

Among its trustee services, it offers trade-date



INVESTORS

Hellman & Friedman Capital Partners has purchased an 18 percent equity interest in Great American from Equity Holdings Limited, a partnership controlled by Samuel Zell.

Great American is a diversified manufacturing, agricultural chemicals and financial services company with approximately $2 billion in revenues.

The undersigned negotiated this transaction.

An investor group, including a management team led by John Thorbeck, has acquired substantially all of the assets of The Geo. E. Keith Company, "makers of fine quality shoes for over 200 years."

The undersigned negotiated and structured this transaction and Hellman & Friedman Capital Partners is the lead equity investor.

FINANCIAL ADVISORS

The Clorox Company

has acquired the Household Products Business of

American Cyanamid Company

including Pine Sol liquid cleaners and Combat household insecticides.

The undersigned acted as financial advisor to The Clorox Company in this transaction.

Esprit de Corp., a leading sportswear manufacturer, has been acquired by

SFO Holdings Inc.

a corporation formed by Susie Tompkins, Isaac Stein, Bruce Katz and Esprit de Corp. Ltd. (H.K.).

The undersigned acted as financial advisor to Susie Tompkins and SFO Holdings Inc., and assisted in negotiating and structuring this transaction and in arranging financing.

Hellman & Friedman is a private investment banking partnership which manages Hellman & Friedman Capital Partners, a $327 million special situation investment fund, and provides financial advisory services, with particular emphasis on mergers, acquisitions and restructurings. We focus on working with outstanding management teams, particularly in family-controlled public and private companies and in unusually complex situations, where our investment experience, financial expertise and capital can add significant value.

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First Wachovia Trust Services

301 N. Main St., Winston-Salem, N.C. 27150; (919) 770-5833

Clients	431
Average plan size (participants)	2,189
Median plan size (participants)	931
Administrative services staff	293

First Wachovia Trust Services is a bank/trust company.

Among its trustee services, it offers settlement date accounting for valuation of assets; multiple sources for securities pricing; and securities lending support.

Its record-keeping services can handle unlimited contribution categories and investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries; and coordination with GIC services.

Other services include company stock accounting (share), multiple manager processing, custom statement/report design, transaction-based processing and master trust accounting.

Software is purchased from an outside vendor.

Service offices are in Winston-Salem and Atlanta.

Fees are based on the number of participants/fund and asset value.

The key executive overseeing defined contribution plan administrative services is Hevin E. Adams.

First Wisconsin Trust Co.

777 E. Wisconsin, Milwaukee, Wis. 53202; (414) 765-4444

Clients	656
Average plan size (participants)	300
Administrative services staff	17

First Wisconsin Trust Co. is a trust company.

Among its trustee services, it offers trade-date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include administration, investment management, securities lending, on-line access, custodial services and performance measurement.

Software is purchased from an outside vendor.

Service offices are in Milwaukee, Green Bay, Appleton, Wausau and Sheboygan; Chicago; West Palm Beach, Fla.; Stillwater, Minneapolis and St. Paul, Minn.; and Phoenix, Ariz.

Fees are calculated per participant and are based on time and complexity involved.

The key executive overseeing defined contribution plan administrative services is Rick Handler.

Fleet/Norstar Employee Benefit Services Inc.

Peter D. Kiernan Plaza, Albany, N.Y. 12207; (518) 447-2373

Clients	840
Average plan size (participants)	100
Median plan size (participants)	75
Administrative services staff	40

Fleet/Norstar Employee Benefit Services Inc. is an employee benefit consulting firm.

Among its trustee services, it offers (through Norstar Trust Co.) settlement date accounting for valuation of assets; multiple sources for securities pricing; and daily transactions reports.

Its record-keeping services can handle 30 contribution categories; 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms; support for dividend re-investment program; limited proxy voting and tabulation services; and coordination with GIC carriers.

Other services include investment management available through Fleet/Norstar Investment Advisors; plan design: actuarial consulting; paying agency and custodial.

Software is purchased from an outside vendor.

Service offices are in Albany, Providence, Rochester and Buffalo.

Fees are based on hourly rates and set fees.

Key executives overseeing defined contribution plan administrative services are Ken Altman, Ed Brown, Lou Bloom, Roscoe Haynes and Gus Ptatas.

Godwins Inc.

549 Pleasantville Road, Briarcliff, N.Y. 10510; (914) 747-2002

Administrative services staff	55

Godwins Inc. is an employee benefit consulting firm.

Its record-keeping services can handle 15 contribution categories; 10 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; 800 numbers for participant balance inquiries; and coordination with GIC carriers.

Software is purchased from an outside vendor.

Service offices are nationwide.

Fees are calculated based on the number of participants, complexity of plan, valuation frequency, time and expense.

Key executive overseeing defined contribution plan administrative services is Michael W. Dunigan.

Harris Trust & Savings Bank

111 W. Monroe, Chicago, Ill. 60690; (312) 461-2121

Clients	120
Average plan size (participants)	3,000
Median plan size (participants)	300
Administrative services staff	30

Harris Trust & Savings Bank is a bank.

Among its trustee services, it offers trade date, settlement date and tax-lot accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle unlimited contribution categories; unlimited investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include consulting services in plan design, employee communication, form preparation, problem solving, efficiency studies, discrimination testing alternatives and projections and administration training and documentation.

Software is purchased from an outside vendor.

Fees are calculated based on the number of funds offered, the number of participants and the number of sources of contribution in the plan.

Key executives overseeing defined contribution plan administrative services are Jon S. Brightman, Nancy B. Wolcott and Carolyn J. Faehling.

Hay/Huggins Co. Inc.

229 S. 18th St., Philadelphia, Pa. 19103; (215) 875-2300

Clients	29
Average plan size (participants)	1,200
Median plan size (participants)	525
Administrative services staff	15

Hay/Huggins Co. Inc. is an employee benefit consulting firm.

Its record-keeping services can handle 20 contribution categories and 20 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping services; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include plan consulting, compliance and legal services, communication services, enrollment service, discrimination testing and plan limitation testing.

Software is written internally.

Service offices also are in New York and Los Angeles.

Administration fees are bundled based on a per participant fee; consulting, compliance and communication fees are based on time and expense.

Key executive overseeing defined contribution plan administrative services is Robert Liotto.

Hazlehurst & Associates Inc.

400 Perimeter Center Terrace, Suite 850, Atlanta, Ga. 30346; (404) 395-9880

Clients	129
Average plan size (participants)	2,973
Median plan size (participants)	2,875
Administrative services staff	65

Hazlehurst & Associates Inc. is an employee benefit consulting firm.

Its record-keeping services can handle 10 contribution categories and 8 investment selections; transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; an 800 number for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services provided are actuarial, consulting, plan design, communication, compliance testing and custom software.

Software is written internally.

A service office also is in Seattle.

Fees are calculated based on number of participants, time and expense.

Key executive overseeing defined contribution plan administrative services is T. Ray McKinney.

Hewitt Associates

100 Half Day Road, Lincolnshire, Ill. 60069; (708) 295-5000

Clients	250
Average plan size (participants)	5,500
Administrative services staff	400

Hewitt Associates is an employee benefit consulting firm.

Its record-keeping services can handle 20 contribution categories and 15 investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; assistance with filing of necessary tax forms with government agencies; support for dividend re-investment program; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include comprehensive interactive administration; investment manager evaluation and selection; and employee communication.

Software is written internally.

Service offices also are in Atlanta; Bedminster, N.J.; Rowayton, Conn.; Santa Ana, Calif.; Walnut Creek, Calif.; The Woodlands, Texas; and Toronto.

Fees are calculated based on number of participants, complexity of plan, time and expenses, and frequency of valuations.

Key executive overseeing defined contribution plan administrative services is Gail Kellogg.

Hibernia National Bank

P.O. Box 61540, New Orleans, La. 70161; (504) 586-5542

Clients	245
Average plan size (participants)	35
Median plan size (participants)	50
Administrative services staff	26

Hibernia National Bank is a bank.

Among its trustee services, it offers trade-date accounting for valuation of assets; daily transactions reports; and securities lending support.

Its record-keeping services can handle 8 contribution categories and 20 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; proxy voting and tabulation services; and coordination with GIC carriers.

Software is purchased from an outside vendor.

Service offices also are in Baton Rouge, La., and Dallas.

Fees are calculated based on the number of participants for record-keeping services and investment shifts and hourly rates for government filings.

Key executives overseeing defined contribution plan administrative services are Ben R. Byers and Teresa L. Montgomery.

Holzman Post Ludwig & Schwartz Chtd.

125 S. Wilke Road, Arlington Heights, Ill. 60005; (708) 392-2999

Clients	700
Average plan size (participants)	50
Median plan size (participants)	30
Administrative services staff	16

Holzman Post Ludwig & Schwartz Chtd. is a employee benefit consulting firm.

Its record-keeping services can handle 5 contribution categories and 5 investment selections; up to quarterly transfers and reallocations among investment funds; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; and coordination with GIC carriers.

Other services include design consultations, plan documents, employee communications, coordination with other plans and actuarial calculations.

Software is written internally.

Fees are calculated on complexity of plan, number of participants, frequency of valuations, types of investments, time and expenses.

Key executives overseeing defined contribution plan administrative services are George F. Castello, Mark Schwartz, Ira A. Post and William C. Ludwig.

Kwasha Lipton

2100 N. Central Road, Fort Lee, N.J. 07024; (201) 592-1300

Clients	150
Average plan size (participants)	4,000
Median plan size (participants)	3,000
Administrative services staff	65

Kwasha Lipton is an employee benefit consulting firm.

Its record-keeping services can handle 16 contribution categories and 99 investment selections; transfers on demand and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include special management reports and special employee communications.

Software is written internally.

Fees are calculated based on estimated work.

Key executive overseeing defined contribution plan administrative services is Sheila Berkman-Rodbell.

LaSalle National Trust

135 S. LaSalle St., Chicago, Ill. 60603; (312) 443-2480

Clients	250
Average plan size (participants)	300
Median plan size (participants)	150
Administrative services staff	30

LaSalle National Trust is a trust company.

Among its trustee services, it offers trade-date, settlement date and tax-lot accounting; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle unlimited contribution categories and investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include pooled investment funds.

Service offices are in the Midwest and on the West Coast.

Software is purchased from an outside vendor.

Fees for trustee services are based on assets; fees for participant record-keeping are based on number of funds and frequency of reporting.

Key executives overseeing defined contribution plan administrative services are William Kusar, Linda Ralston and Linda Porcher.

Liberty National Bank of Louisville

P.O. Box 32500, Louisville, Ky. 40232; (502) 566-2038

Clients	200
Average plan size (participants)	75
Median plan size (participants)	35
Administrative services staff	6

Liberty National Bank of Louisville is a bank.

Among its trustee services it offers settlement date and tax-lot accounting and multiple sources for securities pricing.

Its record-keeping services can handle 10 contribution categories and 10 investment selections; monthly transfers and reallocations among investment funds; federal tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include start-up assistance for 401(k) plans.

Software is purchased from an outside vendor.

Fees are based on activity and number of participants.

Key executive overseeing defined contribution plan administrative services is LuAnn Epperson.

Malden Trust Co.

94 Pleasant St., Malden, Mass. 02148; (617) 321-1111

Clients	40
Average plan size (participants)	30
Administrative services staff	6

Malden Trust Co. is a trust company.

Among its trustee services, it offers tax-lot accounting; multiple sources for securities pricing; and daily transaction reports.

Its record-keeping services can handle 10 contribution categories and 10 investment selections; flexible transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; and filing of necessary tax forms with government agencies.

Other services include administrative testing and tax form preparation.

Software is purchased from an outside vendor.

Fees are based on plan size, activity and reporting frequency.

Key executives overseeing defined contribution plan administrative services are Herbert E. Claflin and Sam Banov.

Manufacturers Hanover Trust

450 W. 33rd St., New York, N.Y. 10001; (212) 613-7950

Clients	105
Average plan size (participants)	8,000
Median plan size (participants)	3,000
Administrative services staff	30

Manufacturers Hanover Trust is a trust company.

Among its trustee services, it offers trade-date, settlement date and tax-lot accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 35 contribution categories and 100 investment selections; transfer and reallocations among investment funds as frequently as needed; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include employee communications, prototype plans, investment management and benefit payments.

Software is purchased from an outside vendor.

Trustee fees are based on number of investment funds and market value; record-keeping fees are based on the number of processing cycles, participants and special services.

Key executives overseeing defined contribution plan administrative services are Eugene Bacich and Thomas Cooney.

Manufacturers National Bank of Detroit

411 W. Lafayette, Detroit, Mich. 48226; (313) 222-4000

Clients	780
Average plan size (participants)	170
Median plan size (participants)	150
Administrative services staff	211

Manufacturers National Bank of Detroit is a bank.

Among its trustee services, it offers settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports and securities lending support.

Its record-keeping services can handle 9 contribution categories and 25 investment selections; quarterly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include discrimination testing and flexibility in receiving information from clients.

Software is purchased from an outside vendor.

Fees are based on the number of participants.

Key executives overseeing defined contribution plan administrative services are Steve Hawkins, John Ronald, Rose Pelot, Mike Mudge and Tom Eardley.

Marine Midland Bank

250 Park Ave., New York, N.Y. 10177; (212) 563-2724

Clients	115
Average plan size (participants)	300
Median plan size (participants)	700
Administrative services staff	70

Marine Midland Bank is a bank.

Among its trustee services, it offers trade-date, settlement date and tax-lot accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories and 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include investment management and benefit payments.

Software is purchased from an outside vendor.

Fees are based on the size and complexity of plan.

Key executives overseeing defined contribution plan administrative services are Moira Patterson, James Esposito, Stephen J. Hartman and Ken Sniatecki.

Marshall & Ilsley Trust Co.

770 N. Water St., Milwaukee, Wis. 53202; (414) 287-7187

Clients	455
Average plan size (participants)	355
Median plan size (participants)	100
Administrative services staff	85

Marshall & Ilsley Trust Co. is a trust company.

Among its trustee services, it offers settlement date accounting; one source for securities pricing; and on-line daily transactions reports.

Its record-keeping services can handle 99 contribution categories and 99 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC

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carriers.

Other services include non-discrimination and 415 testing and on-line access to participant, payment and trust account information.

Service offices also are in Naples, Fla., and Phoenix, Ariz.

Software is purchased from an outside vendor and written internally.

Record-keeping fees are based on number of sources, frequency of allocation and number of participants; trustee fees are based on a combination of market value and service-based fees.

Key executive overseeing defined contribution plan administrative services is Morry L. Birnbaum.

Mellon Bank

1 Mellon Bank Center, Pittsburgh, Pa. 15258; (412) 234-1336

Clients	166
Administrative services staff	65

Mellon Bank is a bank.

Among its trustee services, it offers trade-date and tax-lot accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle unlimited contribution categories and investment selections; transfers and reallocations among investment funds on demand; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include on-line inquiry for participant and investment data, plan design, consulting, communications and telephone access to participant accounts.

Software is written internally for the trust system and purchased from an outside vendor for the record-keeping system.

Service offices also are in Philadelphia, Harrisburg, Pa., and San Francisco.

Trustee fees are based on assets and number of accounts and transactions; record-keeping fees are based on number of participants and plan complexity.

Key executives overseeing defined contribution plan administrative services are James D. Kohley and Richard S. Thomas.

Financing and investing in emerging markets: March 4.

Mercantile Bank of St. Louis

P.O. Box 387, St. Louis, Mo. 63166; (314) 425-1782

Clients	450
Average plan size (participants)	178
Median plan size (participants)	25
Administrative services staff	33

Mercantile Bank of St. Louis is a bank.

Among its trustee services, it offers tax-lot accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 35 contribution categories and 99 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include ESOP administration and record keeping; mutual funds; and custom participant certificate design.

Software is purchased from an outside vendor.

Investment fees are based on market value; record-keeping fees are based on the number of participants and investment funds.

Key executives overseeing defined contribution plan administrative services are Doug Foxx, Pat Withers and Bob Byrne.

When Burroughs And Sperry Merged Into Unisys, Which Master Trustee Did They Bring On Line?

UNISYS

The Burroughs/Sperry merger was the largest ever for the computer industry.

It produced a strong new company, with two distinct pension asset pools totalling $3 billion—and a decision to make.

Dealing with two separate master trustees was not practical.

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This all makes for timely and accurate reporting. With information more easily retrievable for Unisys, through our on-line data base. And it means portfolio changes are handled and settled smoothly, because our good working rapport with Unisys' investment managers eliminates operational hindrances. Maybe that's why Harris Bank is one of the favorite trustees among investment managers.

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William M. Mercer Inc.

1166 Avenue of the Americas, New York, N.Y. 10036; (212) 345-7584

Clients	5,000
Average plan size (participants)	1,000
Median plan size (participants)	1,000
Administrative services staff	600

William M. Mercer Inc. is an employee benefit consulting firm.

Its record-keeping services can handle unlimited contribution categories and 30 investment selections; one transfer and reallocation among investment funds per cycle; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping services; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include plan design and communication and selection of investment managers.

Software is written internally.

Service offices are located nationwide.

Fees are based on number of participants; complexity of plan; time and expense; and valuation frequency.

Key executives overseeing defined contribution plan administrative services are Daniel H. Jackson, Daniel L. Klein, Robert B. Aglira, Kathleen P. Lamb, W. Kenneth Lutz and Daniel L. Zegibe.

Merrill Lynch

800 Scudders Mill Road, Plainsboro, N.J. 08536; (609) 282-2233

Merrill Lynch, a financial services and brokerage company, offers trustee services.

Its record-keeping services can handle multiple contribution categories and investment selections; daily transfers and reallocations among investment funds; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances. Federal and state tax withholding also is offered if the firm acts as trustee.

Administrative services provide an 800 number for participant balance inquiries and daily transactions and coordination with the firm's GIC carriers. Coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; and proxy voting and tabulation services also is offered if the firm acts as trustee.

Software is provided by an outside vendor.

Michigan National Bank

P.O. Box 9065; Farmington Hills, Mich. 48333-9065; (313) 473-3550

Clients	300
Average plan size (participants)	75
Administrative services staff	19

Michigan National Bank is a bank.

Among its trustee services, it offers trade-date and settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories and 10 investment selections; quarterly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; an 800 number for participant balance inquiries; and coordination with GIC carriers.

Other services include customized participant statements and investment management.

Software is purchased from an outside vendor.

Service offices also are in Grand Rapids and Lansing.

Fees are based on assets or transactions depending on type of account.

Key executive overseeing defined contribution plan administrative services is Robert Howard.

Midlantic National Bank

Metro Park Plaza, Edison, N.J. 08818; (201) 321-8382

Clients	150
Average plan size (participants)	120
Median plan size (participants)	200
Administrative services staff	13

Midlantic National Bank is a bank.

Among its trustee services, it offers trade-date accounting for valuation of assets; multiple sources for securities pricing; and daily transactions reports.

Its record-keeping services can handle 9 contribution categories and 15 investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; 800 number for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include mutual funds; master plan; and employee communication.

Software is purchased from an outside vendor.

A service office also is in Mt. Laurel, N.J.

Fees are based on contribution types, frequency of reporting, and number of investment options.

Key executives overseeing defined contribution plan administrative services are Louis Cozens and Carole Finnegan.

Mitchell & Hartmann Inc.

13400 Riverside Drive, Sherman Oaks, Calif. 91423, (818) 907-6800

Clients	125
Average plan size (participants)	60
Median plan size (participants)	30
Administrative services staff	5

Mitchell & Hartmann Inc. is an employee benefit consulting firm.

Its record-keeping services can handle 8 contribution categories and 6 investment selections; unlimited transfers and reallocations among investment funds; loan provisions; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; and filing of necessary tax forms with government agencies.

Other services include benefits consulting.

Service offices also are in Los Angeles.

Software is purchased from an outside vendor.

Fees are based on time and expenses.

Key executives overseeing defined contribution plan administrative services are Lawrence Mitchell and Jeffrey F. Hartmann.

National Benefit Consultants

28800 Orchard Lake Road, Suite 210, Farmington Hills, Mich. 48334; (313) 932-4020

Clients	69
Average plan size (participants)	70
Median plan size (participants)	50
Administrative services staff	6

National Benefit Consultants Inc. is an employee benefit consulting firm and a third-party administrator.

Its record-keeping services can handle 99 contribution categories; 99 investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include plan design, enrollment meetings, all IRS compliance and governmental filings, trust asset accounting, and termination and hardship distributions.

Software is written internally.

Fees are calculated using a base fee plus a per-participant fee; special services on a time and charges basis.

Key executives overseeing defined contribution plan administrative services are Michael T. Stacey, Cynthia A. Suszek and Howard Weiman.

National City Bank

1900 E. Ninth St., Cleveland, Ohio 44114; (216) 575-2686

Clients	197
Average plan size (participants)	400
Median plan size (participants)	86
Administrative services staff	36

National City Bank is a bank.

Among its trustee services, it offers settlement date accounting; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle variable contribution categories; variable investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers. It is in the process of establishing 800 numbers for participant balance inquiries and transactions.

Other services include investment management, prototype plan documents, employee plan promotion material and seminars.

Software is written internally.

Other service offices are in Louisville, Ky., and in Ohio in Columbus, Toledo, Dayton and Akron.

Fees are calculated based on asset value and number of participants.

Key executives overseeing defined contribution plan administrative services are E.J. Elowski Jr., William F. Barrott and R. Kent Ludwig.

NCNB

1 NCNB Plaza T10-10, Charlotte, N.C. 28255; (704) 386-5115

Clients	675
Average plan size (participants)	100
Median plan size (participants)	150
Administrative services staff	75

NCNB is a bank.

Among its trustee services, it offers trade-date, settlement-date and tax-lot accounting; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 40 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Software is purchased from an outside vendor.

Service offices also are in Raleigh, N.C.; Columbia, S.C.; and Tampa.

Fees are calculated based on the number of participants and plan complexity.

Key executives overseeing defined contribution plan administrative services are Merwyn Rogers, Frank Frazzitta, Kay Cooper and James Jackson.

Noble Lowndes

33 Evergreen Place, East Orange, N.J. 07019; (201) 675-8900

Clients	4,300
Average plan size (participants)	375
Median plan size (participants)	500
Administrative services staff	90

Noble Lowndes is an employee benefit consulting firm.

Its record-keeping services can handle 10 contribution categories and 30 investment selections; transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping services; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include comprehensive employee consulting; administration for pension and retirement plans, group health and welfare benefits, compensation; asset consulting; and employee communications.

Software is purchased from an outside vendor.

Service offices also are in Chicago; Garden City, N.Y.; New York; Philadelphia; Langhorne, Pa.; San Francisco; Atlanta; Washington; Dover, Del.; Boston and the United Kingdom.

Fees are calculated based on time and expenses.

Key executives overseeing defined contribution plan administrative services are R. Theodore Benna, Kenneth Hunt and Robert Panepinto.

North Central Trust

311 Main St., La Crosse, Wis. 54601; (608) 782-1148

Clients	115
Average plan size (participants)	133
Median plan size (participants)	17
Administrative services staff	4

North Central Trust Co. is a trust company.

Among its trustee services, it offers settlement-date accounting; multiple sources for securities pricing; and daily transactions reports.

Its record-keeping services can handle 10 contribution categories and 10 investment selections; quarterly transfers and reallocations among investment funds; federal tax withholding; loan provisions; and comprehensive reports to plan sponsor and to participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include defined contribution plan consulting services; IRA rollover accounts; SEP plans; ESOP plans; and cafeteria plans.

Software is purchased from an outside vendor.

Fees are calculated on average asset size and number of participants.

The key executive overseeing defined contribution plan administrative services is John P. McCann.

The future of guaranteed investment contracts will be explored in the March 18 edition.

The Northern Trust Co.

50 S. LaSalle, Chicago, Ill. 60675; (312) 630-6000

Clients	314
Administrative services staff	47

Northern Trust Co. is a trust company.

Among its trustee services, it offers trade-date, settlement-date and tax-lot accounting; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Administrative services provide coordination of trust and record-keeping services; reconciliation of trust assets; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include custody; income collection; capital structure changes; trade settlements; standard reporting, including 5500s; automated cash management; investment management; benefit payments; securities lending; performance analysis; on-line reporting; and customized reporting.

Software is written internally or, if purchased from an outside vendor, customized internally.

Service offices also are in San Francisco, Los Angeles, Dallas and New York.

Fees are calculated based on the number of investment managers, the number and type of transactions and the market value of assets.

Key executives overseeing defined contribution plan administrative services are John F. Sutfin and Douglas F. Mitchell.

Norwest Bank Minnesota

Sixth and Marquette, Minneapolis, Minn. 55479-0035; (612) 667-5023

Clients	250
Average plan size (participants)	636
Median plan size (participants)	195
Administrative services staff	50

Norwest Bank Minnesota is a bank.

Among its trustee services, it offers settlement-date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 20 contribution categories; 20 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries; and coordination with GIC carriers.

Other services include investment products, enrollment meetings, mailing of participant reports, 401(k) and (m) testing, prototype documents, tape output for comprehensive benefit statements, performance measurement, master trust reporting, client newsletters and participant communication materials.

Software is purchased from an outside vendor.

Fees are calculated based on assets, number of funds, number of participants and valuation frequency.

Key executives overseeing defined contribution plan administrative services are Scott Spiker, Joyce Traynor, Larry Insveld and Laurie Nordquist.

Pan-American Life Insurance

601 Poydras, New Orleans, La. 70130; (504) 566-3739

Clients	250
Average plan size (participants)	75
Median plan size (participants)	100
Administrative services staff	18

Pan-American Life Insurance Co. is an insurance company.

Its record-keeping services can handle 10 contribution categories; four investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; and filing of necessary tax forms with government agencies.

Other services include plan document, SPD, 401(k)/(m) testing, withdrawal calculations, calculation of vested benefits, 1099R, W2P, minimum coverage, minimum participation, 401(a)(4) testing, top-heavy testing and 415 testing.

Software is purchased from an outside vendor.

Service offices also are in Atlanta, Baton Rouge, Chicago, Cincinnati, Dallas, Detroit, Houston, Jackson, Los Angeles, Memphis, Nashville, Philadelphia, St. Louis, San Francisco and Shreveport.

Fees are calculated based on the value of plan assets; number of participants; and testing and government filing services rendered.

Key executives overseeing defined contribution plan administrative services are Pat A. Lombard and A. Kathryn Barnhill.

Pension Planning Co.

355 Lexington Ave., New York, N.Y. 10017; (212) 867-4100

Clients	104
Average plan size (participants)	500
Median plan size (participants)	500
Administrative services staff	17

Pension Planning Co. Inc. is an employee benefit consulting firm.

Its record-keeping services can handle unlimited contribution categories; unlimited investment selections; quarterly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and plan participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include non-discrimination testing, employee communications, surveys, administration manual and forms, 1099-R, consulting, newsletters, monitoring IRS limits, and calculating investment returns.

Software is written internally.

Service offices also are in Atlanta, Cleveland, Detroit, Los Angeles, Boca Raton, Washington, Boston, Philadelphia and Dallas.

Fees are calculated based on the number of participants, frequency of valuations and statements, the number of funds and the number of types of contributions.

Key executives overseeing defined contribution plan administrative services are Donald A. Lockwood and Gena Buchwald.

PNC Financial Corp.

Fifth Avenue & Wood Street, Pittsburgh, Pa. 15265; (412) 762-3773

Clients	1,200
Average plan size (participants)	500
Median plan size (participants)	600
Administrative services staff	55

PNC Financial Corp. is a bank.

Among its trustee services, it offers settlement-date accounting for valuation of assets; daily transactions reports; and limited securities lending support.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include customized statements, employee communication meetings, PC hand off (i.e. disc and tape transmission) and remote access terminals.

Software is purchased from an outside vendor.

Other service offices in Pennsylvania are in Philadelphia, Erie and Scranton; and in Ohio, in Cincinnati, Canton, Lorain, Dayton and Newark.

Fees are calculated based on assets plus account maintenance, record keeping and transactions.

Key executives overseeing defined contribution plan administrative services are Bill Erb, Rick Larimer and Gary Wilson.

The Prudential Asset Management Co. Inc.

W.W. Scranton Office Park, 30 E.D. Preate Drive, Moosic, Pa. 18507-1796; (717) 341-6200

Clients	1,200
Average plan size (participants)	350
Administrative services staff	200

The Prudential Asset Management Co. Inc. is an insurance company subsidiary specializing in pension investment and record-keeping services.

It offers settlement-date accounting for valuation of assets. Other trust services are available through a trust company subsidiary of the firm's parent.

Its record-keeping services can handle six contribution categories; 10 investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include plan services on either an investment-only, full-service or record-keeping-only basis.

Software is written internally.

Service offices also are in Florham Park, N.J.; Woodland Hills, Calif.; and Chicago.

Fees are calculated based on a normal comprehensive full-service package; fees for additional services are based on case-need criteria.

Key executives overseeing defined contribution plan administrative services are Harold R. Hopkins Jr., Steven E. Benson and August A. Urgola.

Gerald T. Reilly & Co., Certified Public Accountants

424 Adams St., Milton, Mass. 02186; (617) 696-8900

Clients	25
Average plan size (participants)	50
Median plan size (participants)	25
Administrative services staff	5

Gerald T. Reilly & Co., Certified Public Accounts, is an employee benefit consulting firm and a third-party administrator.

Its record-keeping services can handle 10 contribution categories and 10 investment selections; transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping services; reconciliation of trust assets and participant records; and filing of necessary tax forms with government agencies.

Other services include implementation and administration of Section 125 plans, and accounting and record-keeping services.

Software is purchased from an outside vendor.

Fees are calculated based on the number of participants, frequency of valuations and complexity of plan.

The key executive overseeing defined contribution plan administrative services is Frank T. Ardito.

Seafirst Bank

701 Fifth Avenue, Seattle, Wash. 98104; (206) 358-3297

Clients	130
Administrative services staff	5

Seafirst Bank is a bank.

Among its trustee services, it offers trade-date and settlement-date accounting; and multiple sources for securities pricing.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and plan participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include discrimination testing.

Software is purchased from an outside vendor.

Fees are calculated on a per-participant and hourly basis.

The key executive overseeing defined contribution plan administrative services is Debby Thorvilson.

Security Trust Co.

2 N. Charles St., Baltimore, Md. 21203; (301) 244-1935

Clients	619
Average plan size (participants)	70
Administrative services staff	20

Security Trust Co. is a trust company.

Among its trustee services, it offers trade-date accounting; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 30 investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include employee benefits consulting; employee communications; prototype plans; and plan maintenance.

Software is purchased from an outside vendor.

Services offices also are in Washington and Tysons Corner, Va.

Trust service fees are based on the market value of plan assets; all other fees are based on a fee schedule.

The key executive overseeing defined contribution plan administrative services is David Sawtelle.

Signet Trust Co.

P.O. Box 26311, Richmond, Va. 23260; (804) 771-7658

Clients	254
Average plan size (participants)	98
Median plan size (participants)	112
Administrative services staff	9

Signet Trust Co. is a trust company.

Among its trustee services, it offers trade-date and settlement-date accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; 53 investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; and proxy voting and tabulation services.

Other services include consulting, compliance testing and investment splits.

Software is purchased from an outside vendor.

Fees are calculated on the number of participants, the number of investment funds, the number of types of contributions and the frequency of allocations.

Key executives overseeing defined contribution plan administrative services are Todd Pitts and Frank Pipino.

Small, Parker and Blossom

4200 N. Knoxville, Peoria, Ill. 61614; (309) 682-4200

Clients	500
Average plan size (participants)	75

Guaranteed Investment Contracts

- Qualified
- Nonqualified

Sun Life
A SunAmerica Company

Sun Life Insurance Company of America
11601 Wilshire Blvd.
Los Angeles, CA 90025-1748
(203) 397-1995

"AA" S&P Rating "A+" A.M. Best Rating

Administrative services staff 18

Small, Parker and Blossom is a third-party administrator.

Its record-keeping services can handle eight contribution categories; 10 investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to sponsors and participants; and daily valuations on participant balances.

Administrative services provide reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include employee benefit plan consulting and administration.

Software is purchased from an outside vendor.

Fees are calculated on a base fee plus per-participant or hourly charges.

Key executives overseeing defined contribution plan administrative services are Carol R. Sears, Linda Byrne and John D. Blossom Jr.

The best and worst deals of 1990 will be detailed in the Jan. 7 edition.

Society Bank & Trust

Three Seagate, P.O. Box 1099, Toledo, Ohio 43699-0099; (419) 259-8746

Clients 315
Average plan size (participants) 50
Median plan size (participants) 20
Administrative services staff 20

Society Bank & Trust is a bank/trust company.

Among its trustee services, it offers tax-lot accounting for valuation of assets; multiple sources for securities pricing; and daily transactions reports.

Its record-keeping services can handle any combination of 200 contribution categories and investment selections; monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping services; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include employee communications and discrimination testing.

Software is purchased from an outside vendor.

A service office also is in Mansfield, Ohio.

Fees are calculated based on market value of assets and record keeping.

Key executives overseeing defined contribution plan administrative services are Robert W. Cabanski and Cynthia D. Webb.

Star Bank

425 Walnut St., Cincinnati, Ohio 45201; (513) 632-4633

Clients 500
Average plan size (participants) 130
Median plan size (participants) 90
Administrative services staff 40

Star Bank is a bank.

Among its trustee services, it offers trade-date and settlement date accounting for valuation of assets; multiple sources for securities pricing; daily transaction reports; and securities lending support.

Its record-keeping services can handle 50 contribution categories; 50 investment selections; quarterly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsors and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include non-discrimination testing, 1 (800) voice response; and top-heavy testing.

Software is purchased from an outside vendor.

Service offices also are in Columbus, Cleveland and Dayton.

Fees are calculated based on the number of participants and market values.

The key executive overseeing defined contribution plan administrative services is Stephen A. Slovensky.

State Mutual Cos.

440 Lincoln St., Worcester, Mass. 01605; (508) 852-1000

Clients 1,000
Average plan size (participants) 300
Median plan size (participants) 2,600
Administrative services staff 150

State Mutual Cos. is an insurance company.

Its record-keeping services can handle unlimited contribution categories; unlimited investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances. State Mutual offers no trustee services, but does offer daily transactions reports for record-keeping services.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; proxy voting and tabulation services; and coordination with GIC carriers.

Other services include prototypes, investments, record keeping, administration, benefit payments, testing, employee communications and government reporting.

Software is written internally.

Service offices also are in Atlanta, Boston, Buffalo, Chicago, Dallas, Greensboro, Los Angeles, Paramus, Philadelphia, Pittsburgh, Puerto Rico, Richmond, San Francisco, Seattle, Tampa and Washington.

Fees are calculated based on plan assets, the number of participants and special services.

The key executive overseeing defined contribution plan administrative services is James E. Gow.

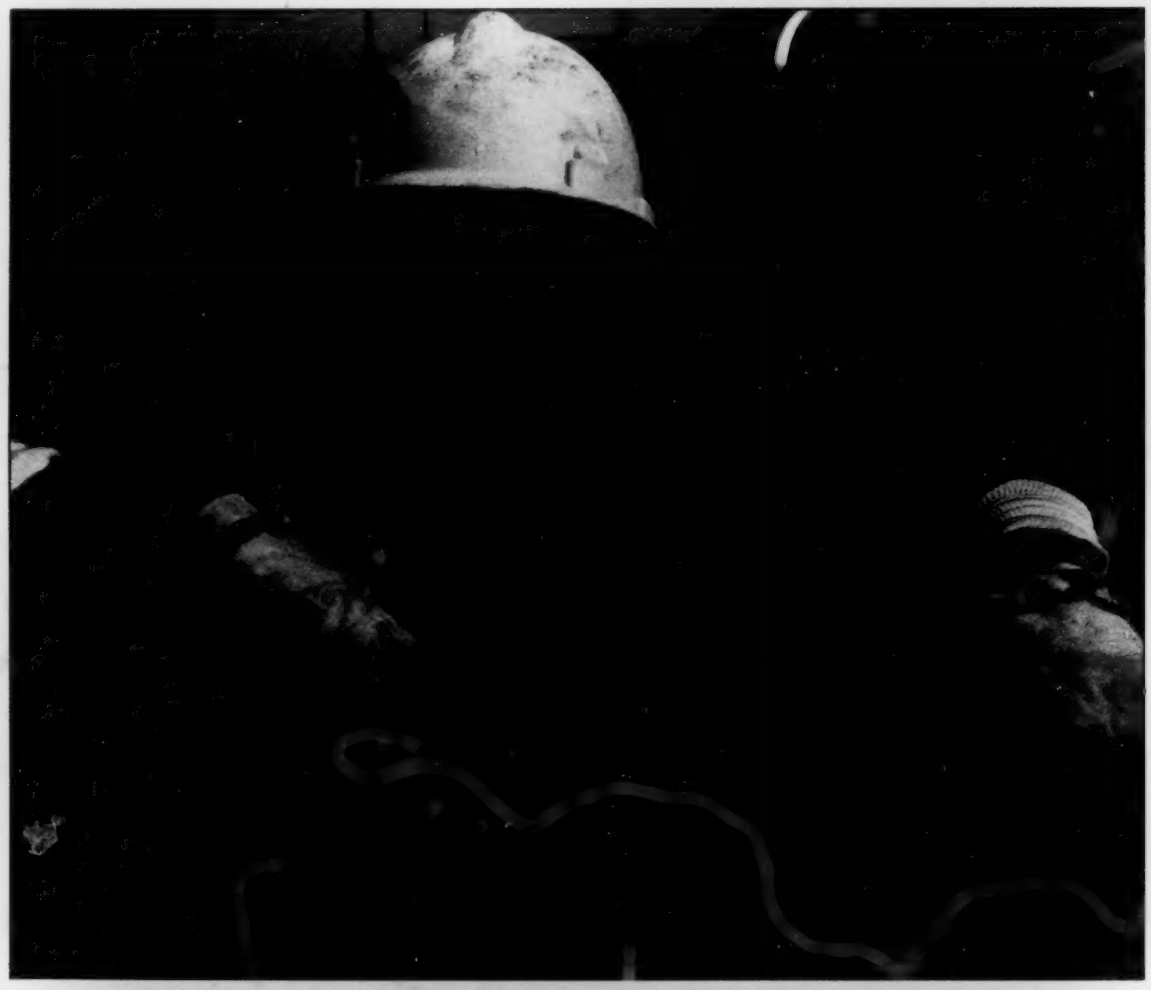
Team Bank

500 Throckmorton St., Fort Worth, Texas 76113; (817) 884-4430

Clients 300
Average plan size (participants) 100
Median plan size (participants) 100
Administrative services staff 15

Team Bank is a bank.

Among its trustee services, it offers trade-date and settlement-date accounting; multiple sources for securities pricing; and daily transactions reports.



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She's your employee participant. If she's happy with the plan, it will be a success. If not, it won't.

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Take GICs for example. We keep participants satisfied with a competitive yield, safety and liquidity. And since we know how much they hate surprises, we always manage for rate sensitivity.

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State Street®

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Its record-keeping services can handle 35 contribution categories; nine investment selections; quarterly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; and coordination with GIC carriers.

Other services include benefit payment services.

Software is purchased from an outside vendor.

Service offices also are in Amarillo, Dallas, Denison and Houston.

Fees are calculated on the frequency of revaluations on a per-participant basis.

Key executives overseeing defined contribution plan administrative services are Gary C. Nelson and Dennis R. McQuiston.

Texas Commerce Investment Management

600 Travis (4-TCT-32), Houston, Texas 77252-8032; (713) 236-4444

Clients	800
Average plan size (participants)	400
Median plan size (participants)	300
Administrative services staff	10

Texas Commerce Investment Management Co. is a bank subsidiary.

Among its trustee services, it offers trade-date and settlement-date accounting for valuation of assets; multiple sources for securities pricing; daily transaction reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; five investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsors and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include custody, master custody, directed trustee and master trustee services.

Software is written internally.

Service offices also are in Arlington; Austin; Beaumont; Brownsville; Corpus Christi; Dallas; El Paso; Fort Worth; Longview; Lubbock; McAllen; Midland-Odessa; New Braunfels; Rio Grande Valley; San Angelo; and San Antonio.

Fees are calculated based on account size and the administrative and fiduciary responsibilities. Fees are negotiable.

Key executives overseeing defined contribution plan administrative services are Walter R. Brauchle, Luke P. Provenzano and Becky Newman.

TPF&C

1500 Market St., Philadelphia, Pa., 19102; (215) 246-6000

Clients	130
Average plan size (participants)	3,800
Median plan size (participants)	3,800
Administrative services staff	130

TPF&C is an employee benefit consulting firm.

Its record-keeping services can handle unlimited contribution categories, investment selection, and transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsors and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include complete record keeping, time sharing, license of software and telephone access to the data base.

Services offices also are in Atlanta, Boston, Chicago, Dallas and Los Angeles.

Software is written internally.

Fees are calculated on the basis of the number of participants, valuation frequency and plan complexity.

The key executive overseeing defined contribution plan administrative services is Mike Hockersmith.

The Travelers Insurance Co.

1 Tower Square, Hartford, Conn. 06183-6030; (203) 277-0111

Clients	650
Average plan size (participants)	600
Median plan size (participants)	1,200
Administrative services staff	100

The Travelers Insurance Co. is an insurance company.

Its record-keeping services can handle unlimited contribution categories and investment selections; daily or monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include plan drafting, amendments and restatements, SPDs, anti-discrimination testing, employee communications, legislative updates, on-line inquiry and input.

Software is written internally.

Service offices also are in Atlanta, Boston, Chicago, Dallas, Detroit, Los Angeles, New York, Philadelphia, St. Louis, San Francisco, Washington and Westport.

Fees are calculated as a per-participant charge.

Key executives overseeing defined contribution plan administrative services are Chester A. Clark, June Adams and Tom Cremona.

The Wyatt Co.

601 13th St. N.W., Washington, D.C. 20005; (202) 508-4760

Clients	2,225
Average plan size (participants)	600
Administrative services staff	425

The Wyatt Co. is an employee benefit consulting firm.

Its record-keeping services can handle 99 contribution categories and 99 investment selections; unlimited transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include providing assistance in GIC placements, trustee searches and fund performance analysis.

Service offices are in Atlanta; Boston; Chicago; Cleveland; Columbus, Ohio; Dallas; Denver; Detroit; Fort Lee, N.J.; Grand Rapids, Mich.; Honolulu; Houston; Irvine, Calif.; Lake Oswego, Ore.; Little Falls, N.J.; Los Angeles; Memphis; Miami; Milwaukee; Minneapolis; New York; Philadelphia; Phoenix; Portland, Ore.; San Diego; San Francisco; Santa Clara, Calif.; Seattle; Stamford, Conn.; Washington; and Montreal.

Software is written internally.

Fees are calculated on the number of participants, plan complexity, valuation frequency and other services requested.

Key executives overseeing defined contribution plan administrative services are Mike Davis, Lee Parks, William Hartman and Tom Hankins.

Yaffe & Co. Inc.

800 N. Charles St., Baltimore, Md. 21201; (301) 332-1166

Clients	30
Average plan size (participants)	500
Administrative services staff	7

Yaffe & Co. Inc. is an employee benefit consulting firm.

Its record-keeping services can handle multiple contribution categories and multiple investment selection (a matrix of 35); transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; and coordination with GIC carriers.

Other services include all discrimination testing; top-heavy testing; design and implementation, selection of trustee/investment manager, communication, IRS submissions, client staff training, procedures manuals, contribution calculation, breakdown of contribution into funds, handle beneficiary records, vesting records, investment performance measurement and legislative updates.

Software is purchased from an outside vendor.

Fees are calculated on a time and charges basis.

The key executive overseeing defined contribution plan administrative services is Judy H. Cox.

SOFTWARE

APEX Data Systems Inc.

6464 E. Grant Road, Tucson, Ariz. 85715; (602) 298-1991

PRODUCT: COGNAC*PLUS
HARDWARE: IBM AT or compatible
MINIMUM MEMORY: 2 megabytes
PRICE: based on number of users
YEAR OF 1ST INSTALLATION: 1988
USERS: 24
PROFESSIONALS: 15
DESCRIPTION: COGNAC*PLUS' principal function is administration and claims payments for self-funded employee benefit plans; processes medical, dental, disability and other coverages including cost containment, PPO and COBRA; totally automated from mail-clerk to EOBs allows HR to lower benefit costs and gain increased control. Other functions or modules include detailed management, analysis and ad hoc reporting capabilities for benefits administration and claims payments. Software can be bought unbundled from hardware. Telephone assistance is available 11 hours a day.
Cynthia Stewart is the client contact.

Benefit Concepts Systems

396 Wampanoag Trail, East Providence, R.I. 02915; (401) 438-7100

PRODUCT: Reimbursement Account Management System
HARDWARE: IBM PC/XT AT or compatible
MINIMUM MEMORY: 640K
PRICE: $2,995
YEAR OF 1ST INSTALLATION: 1986
USERS: 60
PROFESSIONALS: 5
DESCRIPTION: The Reimbursement Account Management System's principal function is to administer Section 125 flexible spending accounts. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day. John W. Hoder is the client contact.

PRODUCT: Flexible Benefit Management System
HARDWARE: IBM PC/XT AT or compatible
MINIMUM MEMORY: 640K
PRICE: $7,495
YEAR OF 1ST INSTALLATION: 1986
USERS: 25
PROFESSIONALS: 5
DESCRIPTION: The Flexible Benefit Management System's principal function is to administer full flexible benefit or cafeteria plans including flexible spending accounts. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day. John W. Hoder is the client contact.

PRODUCT: Benefit Continuation Management System
HARDWARE: IBM PC/XT AT or compatible
MINIMUM MEMORY: 640K
PRICE: $1,595
YEAR OF 1ST INSTALLATION: 1985
USERS: 300
PROFESSIONALS: 5
DESCRIPTION: The Benefit Continuation Management System's principal function is to administer COBRA Compliance. Other functions or modules include retiree and direct billing capability. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day. John W. Hoder is the client contact.

Cascade Technologies Inc.

1001 Avenue of the Americas, New York, N.Y. 10018; (212) 768-7380

PRODUCT: Professional Capital Accumulation System - PROCAS
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
YEAR OF 1ST INSTALLATION: 1985
USERS: 200
PROFESSIONALS: 12
DESCRIPTION: The Professional Capital Accumulation System is a PC-based record-keeping system for defined contribution plans; features parameterized plan setup, data conversion utilities, comprehensive report writer and compliance testing. Other functions or modules include transaction collection and on-line reporting. No hardware is furnished. Telephone assistance is available eight hours a day. Michael F. George is the client contact.

PRODUCT: Compliance Plus
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
YEAR OF 1ST INSTALLATION: 1989
USERS: 200
PROFESSIONALS: 12
DESCRIPTION: Compliance Plus performs the required ADP/ACP tests of defined contribution plans. Other functions or modules include IPC SEC AIS, coverage and participation tests, determination of highly compensated employees. Hardware is not furnished. Telephone assistance is available eight hours a day. Michael F. George is the client contact.

PRODUCT: CAS Voice
HARDWARE: 386 PC, IBM OS/2 version 1.2 or later, VGA
MINIMUM MEMORY: 4 megabytes
YEAR OF 1ST INSTALLATION: 1989
USERS: 25
PROFESSIONALS: 12
DESCRIPTION: CAS Voice communicates personalized benefit information to employees 24 hours a day using a touch-tone phone; it accesses data base information and speaks to employee. Other functions or modules include transaction generation/benefit plan enrollment via telephone. Hardware is not furnished. Telephone assistance is available eight hours a day. Michael F. George is the client contact.

Cyborg Systems

2 N. Riverside Plaza, Chicago, Ill. 60606; (312) 454-1865

PRODUCT: The Human Resource Management Solution - Benefits Administration Module
HARDWARE: mainframe and mini-computer
MINIMUM MEMORY: 512K
YEAR OF 1ST INSTALLATION: 1974
USERS: 1,000
PROFESSIONALS: 250
DESCRIPTION: The Benefits Administration Module simplifies tracking of all employee welfare benefit plans including health insurance, life insurance, disability, and travel and accident plans. The module also tracks deferred benefits such as pension, profit sharing, thrift/savings plans and 401(k).

Other functions or modules include the COBRA Solution, a microcomputer based application that ensures compliance and automates the date sensitive, paper-oriented administrative tasks associated with COBRA.

Software can be bought unbundled from hardware. Telephone assistance is available 24 hours a day. Branch offices are in New York; Atlanta; Dallas; Los Angeles; Cornwall, Ontario; London; Sydney; and Hato Rey, Puerto Rico.

Ellen Snelling is the client contact.

Data Management Ventures

603 Parkway 575, Woodstock, Ga. 30188; (404) 924-7621

PRODUCT: FEE FACTS, Prevailing Fees For Rehabilitative Medicine
HARDWARE: IBM PC or compatibles, IBM mainframe
YEAR OF 1ST INSTALLATION: 1987
USERS: 200
PROFESSIONALS: 2
DESCRIPTION: FEE FACT's principal function is health care cost control — statistically accurate reports of chiropractic, physical therapy, and rehabilitative medicine prevailing fees for more than 80 types of service, by CPT-4 code, for all 50 states. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day.
Richard E. Olson is the client contact.

Dyatron Corp.

210 Automation Way, Birmingham, Ala. 35210; (205) 956-7700

PRODUCT: OMNIPLAN
HARDWARE: IBM or compatible mainframe, IBM AS/400, or IBM PS/2 or compatible 386
MINIMUM MEMORY: 4 megabytes
YEAR OF 1ST INSTALLATION: 1984
USERS: 100
DESCRIPTION: OMNIPLAN provides participant record keeping for all types of defined contribution pension plans. Other functions or modules include loan processing and accounting. Software can be bought unbundled from hardware. Telephone assistance is available 12 hours a day. Branch offices are in New York, Chicago, Jacksonville and Los Angeles.
David Kennedy is the client contact.

Erisco

1700 Broadway, New York, N.Y. 10019; (212) 765-8500

PRODUCT: ImpleFacts
HARDWARE: IBM 370, 30xx, 43xx
YEAR OF 1ST INSTALLATION: 1972
USERS: 80
PROFESSIONALS: 46
DESCRIPTION: ImpleFacts is a record-keeping system for defined contribution plans. Other functions or modules include LoanFacts, an integrated system for administering loans, and FactsLine, touch-tone phone access for participant account information. Software can be bought unbundled from hardware. Telephone assistance is available 24 hours a day. Branch offices are in Los Angeles, Philadelphia and Union, N.J.

Hay/Huggins Co. Inc.

229 S. 18th St., Philadelphia, Pa. 19103; (215) 875-2300

PRODUCT: Capital Accumulation Language (CAL)
HARDWARE: IBM mainframe, modem, terminal or PC
YEAR OF 1ST INSTALLATION: 1986
USERS: 29
PROFESSIONALS: 15
DESCRIPTION: The Capital Accumulation Language's principal function is mainframe application that provides defined contribution plan record-keeping administration to clients. Other functions or modules include discrimination testing, 415 limitation testing, and benefits statements; system can be purchased, accessed on a time-sharing basis, or Hay/Huggins administrators can provide record-keeping functions. Software can be bought unbundled from hardware. Telephone assistance is available seven hours a day. Branch offices are in Los Angeles, New York, Atlanta, Boston, Washington and Walnut Creek, Calif.
Robert Liotto is the client contact.

Hazlehurst & Associates Inc.

400 Perimeter Center Terrace, Suite 850, Atlanta, Ga. 30346; (404) 395-9880

PRODUCT: H&A IRC Section 415 Limit Testing System
HARDWARE: IBM PC, XT, AT or compatible with 1 hard disk and 1 floppy disk drive
PRICE: $6,500
YEAR OF 1ST INSTALLATION: 1985
USERS: 15
PROFESSIONALS: 13
DESCRIPTION: The IRC Section 415 Limit Testing System's principal function is to allow the plan sponsor to perform Section 415 individual and combined plan limitation testing for individuals or groups using current or projected data at early, normal or delayed retirement. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. A branch office is in Seattle.
Stephen A. Martin is the client contact.

PRODUCT: Social Security Calculation System
HARDWARE: IBM PC, XT, AT or compatible with 1 hard disk and 1 floppy disk drive
PRICE: $395
YEAR OF 1ST INSTALLATION: 1985
USERS: 11
PROFESSIONALS: 13
DESCRIPTION: The Social Security Calculation System's principal function is to calculate individual Social Security benefits; calculations include earnings projections and estimates on primary insurance amount, 401(b) covered compensation, actual benefits payable and maximum family benefits in case of retirement, disability or death. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. A branch office is in Seattle.
Stephen A. Martin is the client contact.

PRODUCT: H&A Tailored Benefit Calculation System
HARDWARE: IBM PC, XT, AT or compatible with 1 hard disk and 1 floppy disk drive
PRICE: $21,800
YEAR OF 1ST INSTALLATION: 1985
USERS: 12
PROFESSIONALS: 13
DESCRIPTION: The H&A Tailored Benefit Calculation System's principal function is to calculate pension benefits for individual or a group of employees as defined by plan; the system performs calculation of benefits, stores basic employee data, allows user to input missing earnings for salary projections. Optional benefit calculations and summary reports. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. A branch office is in Seattle.
Stephen A. Martin is the client contact.

PRODUCT: H&A COBRA and Other Beneficiary Data Maintenance System
HARDWARE: IBM PC, XT, AT or compatible with 1 hard disk and 1 floppy disk drive
PRICE: $2,950
YEAR OF 1ST INSTALLATION: 1985
USERS: 5
PROFESSIONALS: 13
DESCRIPTION: The H&A COBRA and Other Beneficiary Data Maintenance System's principal function is to provide a centralized resource for maintaining data necessary to comply with COBRA; the system also stores traditional beneficiary data for both health care and non-health care plans; it provides election notices, premium invoices/coupons and management reports. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. A branch office is in Seattle.
Stephen A. Martin is the client contact.

Health Management Technologies

1042 Country Club Drive, Suite 2-C, Moraga, Calif. 94556; (415) 376-0980

PRODUCT: Return Disability Case Management
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
PRICE: $10,000
YEAR OF 1ST INSTALLATION: 1988
USERS: 60
PROFESSIONALS: 5
DESCRIPTION: The Return Disability Case Management's principal function is case management for workers' compensation, long- and short-term disability, provider management and cost control. Software can be bought with or without hardware. Telephone assistance is available 10 hours a day.
Jim Wolfe is client contact.

Health Risk Management

8000 W. 78th St., Minneapolis, Minn. 55439; (800) 824-3882

PRODUCT: Results PLUS
DESCRIPTION: The Results PLUS' principal function is analysis of medical claims data to identify controllable utilization and pricing patterns contributing to excessive benefit costs; it also recommends solutions and savings. Other functions or modules consist of Phase One — Data Quality Evaluation and Phase Two — Data Analysis. Telephone assistance is available eight hours a day. Branch offices are in Shrewsbury, N.J.; Chicago; and Glendale, Calif.
Liz Leahy is the client contact.

PRODUCT: Benefit Plan Modeling
HARDWARE: IBM or compatible
MINIMUM MEMORY: 640K
DESCRIPTION: The Benefit Plan Modeling's principal function is to calculate the financial impact of benefit plan changes using medical claims data (e.g. changes to deductibles, co-insurance, stop loss, mental health/chemical dependency plan limits. Telephone assistance is available eight hours a day. Branch offices are in Shrewsbury, N.J.; Chicago; and Glendale, Calif.
Liz Leahy is the client contact.

PRODUCT: Benecalc
HARDWARE: IBM or compatible
MINIMUM MEMORY: 640K
DESCRIPTION: The Benecalc's principal function is to prepare and provide medical claims data with utilization criteria and price norms for on-site reporting and analysis; it also identifies utilization, hospital and physician pricing patterns. Other functions or modules include menu of standard reports and ad hoc query facility for customized reporting. Telephone assistance is available eight hours a day. Branch offices are in Shrewsbury, N.J.; Chicago; and Glendale, Calif.
Liz Leahy is the client contact.

Hewitt Associates

100 Half Day Road, Lincolnshire, Ill. 60069; (708) 295-5000

PRODUCT: Future$aver
HARDWARE: IBM or compatible
MINIMUM MEMORY: 400K to 500K
YEAR OF 1ST INSTALLATION: 1989
USERS: 5
PROFESSIONALS: 15
DESCRIPTION: The Future$aver's principal function is to allow employees to calculate future retirement income from all sources. Software can be bought unbundled from hardware. Branch offices are nationwide.
Barbara Van Lieshout is the client contact.

PRODUCT: 415 Calc
HARDWARE: IBM mainframe and IBM PC or compatible
MINIMUM MEMORY: 512K
YEAR OF 1ST INSTALLATION: 1988
USERS: 50
PROFESSIONALS: 10
DESCRIPTION: The 415 Calc's principal function is to calculate one- and two-plan IRC Section 415 benefit limits. Maintains employee data base and produces documentation including audit and summary reports. Software can be bought unbundled from hardware. Branch offices are nationwide.

Its record-keeping services can handle 35 contribution categories; nine investment selections; quarterly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsor and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; and coordination with GIC carriers.

Other services include benefit payment services.

Software is purchased from an outside vendor.

Service offices also are in Amarillo, Dallas, Denison and Houston.

Fees are calculated on the frequency of revaluations on a per-participant basis.

Key executives overseeing defined contribution plan administrative services are Gary C. Nelson and Dennis R. McQuiston.

Texas Commerce Investment Management

600 Travis (4-TCT-32), Houston, Texas 77252-8032; (713) 236-4444

Clients	800
Average plan size (participants)	400
Median plan size (participants)	300
Administrative services staff	10

Texas Commerce Investment Management Co. is a bank subsidiary.

Among its trustee services, it offers trade-date and settlement-date accounting for valuation of assets; multiple sources for securities pricing; daily transaction reports; and securities lending support.

Its record-keeping services can handle 10 contribution categories; five investment selections; daily transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsors and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include custody, master custody, directed trustee and master trustee services.

Software is written internally.

Service offices also are in Arlington; Austin; Beaumont; Brownsville; Corpus Christi; Dallas; El Paso; Fort Worth; Longview; Lubbock; McAllen; Midland/Odessa; New Braunfels; Rio Grande Valley; San Angelo; and San Antonio.

Fees are calculated based on account size and the administrative and fiduciary responsibilities. Fees are negotiable.

Key executives overseeing defined contribution plan administrative services are Walter R. Brauchle, Luke P. Provenzano and Becky Newman.

TPF&C

1500 Market St., Philadelphia, Pa., 19102; (215) 246-6000

Clients	130
Average plan size (participants)	3,800
Median plan size (participants)	3,800
Administrative services staff	130

TPF&C is an employee benefit consulting firm.

Its record-keeping services can handle unlimited contribution categories, investment selection, and transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; and comprehensive reports to plan sponsors and participants.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include complete record keeping, time sharing, license of software and telephone access to the data base.

Services officies also are in Atlanta, Boston, Chicago, Dallas and Los Angeles.

Software is written internally.

Fees are calculated on the basis of the number of participants, valuation frequency and plan complexity.

The key executive overseeing defined contribution plan administrative services is Mike Hockersmith.

The Travelers Insurance Co.

1 Tower Square, Hartford, Conn. 06183-6030; (203) 277-0111

Clients	650
Average plan size (participants)	600
Median plan size (participants)	1,200
Administrative services staff	100

The Travelers Insurance Co. is an insurance company.

Its record-keeping services can handle unlimited contribution categories and investment selections; daily or monthly transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-invesment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include plan drafting, amendments and restatements, SPDs, anti-discrimination testing, employee communications, legislative updates, on-line inquiry and input.

Software is written internally.

Service offices also are in Atlanta, Boston, Chicago, Dallas, Detroit, Los Angeles, New York, Philadelphia, St. Louis, San Francisco, Washington and Westport.

Fees are calculated as a per-participant charge.

Key executives overseeing defined contribution plan administrative services are Chester A. Clark, June Adams and Tom Cremona.

The Wyatt Co.

601 13th St. N.W., Washington, D.C. 20005; (202) 508-4760

Clients	2,225
Average plan(size (participants)	600
Administrative services staff	425

The Wyatt Co. is an employee benefit consulting firm.

Its record-keeping services can handle 99 contribution categories and 99 investment selections; unlimited transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include providing assistance in GIC placements, trustee searches and fund performance analysis.

Service offices are in Atlanta; Boston; Chicago; Cleveland; Columbus, Ohio; Dallas; Denver; Detroit; Fort Lee, N.J.; Grand Rapids, Mich.; Honolulu; Houston; Irvine, Calif.; Lake Oswego, Ore.; Little Falls, N.J.; Los Angeles; Memphis; Miami; Milwaukee; Minneapolis; New York; Philadelphia; Phoenix; Portland, Ore.; San Diego; San Francisco; Santa Clara, Calif.; Seattle; Stamford, Conn.; Washington; and Montreal.

Software is written internally.

Fees are calculated on the number of participants, plan complexity, valuation frequency and other services requested.

Key executives overseeing defined contribution plan administrative services are Mike Davis, Lee Parks, William Hartman and Tom Hankins.

Yaffe & Co. Inc.

800 N. Charles St., Baltimore, Md. 21201; (301) 332-1166

Clients	30
Average plan size (participants)	500
Administrative services staff	7

Yaffe & Co. Inc. is an employee benefit consulting firm.

Its record-keeping services can handle multiple contribution categories and multiple investment selection (a matrix of 35); transfers and reallocations among investment funds; federal and state tax withholding; loan provisions; comprehensive reports to plan sponsor and participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend re-investment program; and coordination with GIC carriers.

Other services include all discrimination testing; top-heavy testing; design and implementation, selection of trustee/investment manager, communication, IRS submissions, client staff training, procedures manuals, contribution calculation, breakdown of contribution into funds, handle beneficiary records, vesting records, investment performance measurement and legislative updates.

Software is purchased from an outside vendor.

Fees are calculated on a time and charges basis.

The key executive overseeing defined contribution plan administrative services is Judy H. Cox.

SOFTWARE

APEX Data Systems Inc.

6464 E. Grant Road, Tucson, Ariz. 85715; (602) 298-1991

PRODUCT: COGNAC*PLUS
HARDWARE: IBM AT or compatible
MINIMUM MEMORY: 2 megabytes
PRICE: based on number of users
YEAR OF 1ST INSTALLATION: 1988
USERS: 24
PROFESSIONALS: 15
DESCRIPTION: COGNAC*PLUS' principal function is administration and claims payments for self-funded employee benefit plans; processes medical, dental, disability and other coverages including cost containment, PPO and COBRA; totally automated from mail-clerk to EOBs allows HR to lower benefit costs and gain increased control. Other functions or modules include detailed management, analysis and ad hoc reporting capabilities for benefits administration and claims payments. Software can be bought unbundled from hardware. Telephone assistance is available 11 hours a day.

Cynthia Stewart is the client contact.

Benefit Concepts Systems

396 Wampanoag Trail, East Providence, R.I. 02915; (401) 438-7100

PRODUCT: Reimbursement Account Management System
HARDWARE: IBM PC/XT AT or compatible
MINIMUM MEMORY: 640K
PRICE: $2,995
YEAR OF 1ST INSTALLATION: 1986
USERS: 60
PROFESSIONALS: 5
DESCRIPTION: The Reimbursement Account Management System's principal function is to administer Section 125 flexible spending accounts. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day. John W. Hoder is the client contact.

PRODUCT: Flexible Benefit Management System
HARDWARE: IBM PC/XT AT or compatible
MINIMUM MEMORY: 640K
PRICE: $7,495
YEAR OF 1ST INSTALLATION: 1986
USERS: 25
PROFESSIONALS: 5
DESCRIPTION: The Flexible Benefit Management System's principal function is to administer full flexible benefit or cafeteria plans including flexible spending accounts. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day. John W. Hoder is the client contact.

PRODUCT:Benefit Continuation Management System
HARDWARE:IBM PC/XT AT or compatible
MINIMUM MEMORY: 640K
PRICE: $1,595
YEAR OF 1ST INSTALLATION: 1985
USERS: 300
PROFESSIONALS: 5
DESCRIPTION: The Benefit Continuation Management System's principal function is to administer COBRA Compliance. Other functions or modules include retiree and direct billing capability. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day. John W. Hoder is the client contact.

Cascade Technologies Inc.

1001 Avenue of the Americas, New York, N.Y. 10018; (212) 768-7380

PRODUCT: Professional Capital Accumulation System - PROCAS
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
YEAR OF 1ST INSTALLATION: 1985
USERS: 200
PROFESSIONALS: 12
DESCRIPTION: The Professional Capital Accumulation System is a PC-based record-keeping system for defined contribution plans; features parameterized plan setup, data conversion utilities, comprehensive report writer and compliance testing. Other functions or modules include transaction collection and on-line reporting. No hardware is furnished. Telephone assistance is available eight hours a day. Michael F. George is the client contact.

PRODUCT: Compliance Plus
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
YEAR OF 1ST INSTALLATION: 1989
USERS: 200
PROFESSIONALS: 12
DESCRIPTION: Compliance Plus performs the required ADP/ACP tests of defined contribution plans. Other functions or modules include IPC SEC AIS, coverage and participation tests, determination of highly compensated employees. Hardware is not furnished. Telephone assistance is available eight hours a day. Michael F. George is the client contact.

PRODUCT: CAS Voice
HARDWARE: 386 PC, IBM OS/2 version 1.2 or later, VGA
MINIMUM MEMORY: 4 megabytes
YEAR OF 1ST INSTALLATION: 1989
USERS: 25
PROFESSIONALS: 12
DESCRIPTION: CAS Voice communicates personalized benefit information to employees 24 hours a day using a touch-tone phone; it accesses data base information and speaks to employee. Other functions or modules include transaction generation/benefit plan enrollment via telephone. Hardware is not furnished. Telephone assistance is available eight hours a day. Michael F. George is the client contact.

Cyborg Systems

2 N. Riverside Plaza, Chicago, Ill. 60606; (312) 454-1865

PRODUCT: The Human Resource Management Solution - Benefits Administration Module
HARDWARE: mainframe and mini-computer
MINIMUM MEMORY: 512K
YEAR OF 1ST INSTALLATION: 1974
USERS: 1,000
PROFESSIONALS: 250
DESCRIPTION: The Benefits Administration Module simplifies tracking of all employee welfare benefit plans including health insurance, life insurance, disability, and travel and accident plans. The module also tracks deferred benefits such as pension, profit sharing, thrift/savings plans and 401(k).

Other functions or modules include the COBRA Solution, a microcomputer based application that ensures compliance and automates the date sensitive, paper-oriented administrative tasks associated with COBRA.

Software can be bought unbundled from hardware. Telephone assistance is available 24 hours a day. Branch offices are in New York; Atlanta; Dallas; Los Angeles; Cornwall, Ontario; London; Sydney; and Hato Rey, Puerto Rico.

Ellen Snelling is the client contact.

Data Management Ventures

603 Parkway 575, Woodstock, Ga. 30188; (404) 924-7621

PRODUCT: FEE FACTS, Prevailing Fees For Rehabilitative Medicine
HARDWARE: IBM PC or compatibles, IBM mainframe
YEAR OF 1ST INSTALLATION: 1987
USERS: 200
PROFESSIONALS: 2
DESCRIPTION: FEE FACT's principal function is health care cost control — statistically accurate reports of chiropractic, physical therapy, and rehabilitative medicine prevailing fees for more than 80 types of service, by CPT-4 code, for all 50 states. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day.

Richard E. Olson is the client contact.

Dyatron Corp.

210 Automation Way, Birmingham, Ala. 35210; (205) 956-7700

PRODUCT: OMNIPLAN
HARDWARE: IBM or compatible mainframe, IBM AS/400, or IBM PS/2 or compatible 386
MINIMUM MEMORY: 4 megabytes
YEAR OF 1ST INSTALLATION: 1984
USERS: 100
DESCRIPTION: OMNIPLAN provides participant record keeping for all types of defined contribution pension plans. Other functions or modules include loan processing and accounting. Software can be bought unbundled from hardware. Telephone assistance is available 12 hours a day. Branch offices are in New York, Chicago, Jacksonville and Los Angeles.

David Kennedy is the client contact.

Erisco

1700 Broadway, New York, N.Y. 10019; (212) 765-8500

PRODUCT: ImpleFacts
HARDWARE: IBM 370, 30xx, 43xx
YEAR OF 1ST INSTALLATION: 1972
USERS: 80
PROFESSIONALS: 46
DESCRIPTION: ImpleFacts is a record-keeping system for defined contribution plans. Other functions or modules include LoanFacts, an integrated system for administering loans, and FactsLine, touch-tone phone access for participant account information. Software can be bought unbundled from hardware. Telephone assistance is available 24 hours a day. Branch offices are in Los Angeles, Philadelphia and Union, N.J.

Hay/Huggins Co. Inc.

229 S. 18th St., Philadelphia, Pa. 19103; (215) 875-2300

PRODUCT: Capital Accumulation Language (CAL)
HARDWARE: IBM mainframe, modem, terminal or PC
YEAR OF 1ST INSTALLATION: 1986
USERS: 29
PROFESSIONALS: 15
DESCRIPTION: The Capital Accumulation Language's principal function is mainframe application that provides defined contribution plan record-keeping administration to clients. Other functions or modules include discrimination testing, 415 limitation testing, and benefits statements; system can be purchased, accessed on a time-sharing basis, or Hay/Huggins administrators can provide record-keeping functions. Software can be bought unbundled from hardware. Telephone assistance is available seven hours a day. Branch offices are in Los Angeles, New York, Atlanta, Boston, Washington and Walnut Creek, Calif.

Robert Liotto is the client contact.

Hazlehurst & Associates Inc.

400 Perimeter Center Terrace, Suite 850, Atlanta, Ga. 30346; (404) 395-9880

PRODUCT: H&A IRC Section 415 Limit Testing System
HARDWARE: IBM PC, XT, AT or compatible with 1 hard disk and 1 floppy disk drive
PRICE: $6,500
YEAR OF 1ST INSTALLATION: 1985
USERS: 15
PROFESSIONALS: 13
DESCRIPTION: The IRC Section 415 Limit Testing System's principal function is to allow the plan sponsor to perform Section 415 individual and combined plan limitation testing for individuals or groups using current or projected data at early, normal or delayed retirement. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. A branch office is in Seattle.

Stephen A. Martin is the client contact.

PRODUCT: Social Security Calculation System
HARDWARE: IBM PC, XT, AT or compatible with 1 hard disk and 1 floppy disk drive
PRICE: $395
YEAR OF 1ST INSTALLATION: 1985
USERS: 11
PROFESSIONALS: 13
DESCRIPTION: The Social Security Calculation System's principal function is to calculate individual Social Security benefits; calculations include earnings projections and estimates on primary insurance amount, 401(b) covered compensation, actual benefits payable and maximum family benefits in case of retirement, disability or death. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. A branch office is in Seattle.

Stephen A. Martin is the client contact.

PRODUCT: H&A Tailored Benefit Calculation System
HARDWARE: IBM PC, XT, AT or compatible with 1 hard disk and 1 floppy disk drive
PRICE: $21,800
YEAR OF 1ST INSTALLATION: 1985
USERS: 12
PROFESSIONALS: 13
DESCRIPTION: The H&A Tailored Benefit Calculation System's principal function is to calculate pension benefits for individual or a group of employees as defined by plan; the system performs calculation of benefits, stores basic employee data, allows user to input missing earnings for salary projections. Optional benefit calculations and summary reports. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. A branch office is in Seattle.

Stephen A. Martin is the client contact.

PRODUCT: H&A COBRA and Other Beneficiary Data Maintenance System
HARDWARE: IBM PC, XT, AT or compatible with 1 hard disk and 1 floppy disk drive
PRICE: $2,950
YEAR OF 1ST INSTALLATION: 1985
USERS: 5
PROFESSIONALS: 13
DESCRIPTION: The H&A COBRA and Other Beneficiary Data Maintenance System's principal function is to provide a centralized resource for maintaining data necessary to comply with COBRA; the system also stores traditional beneficiary data for both health care and non-health care plans; it provides election notices, premium invoices/coupons and management reports. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. A branch office is in Seattle.

Stephen A. Martin is the client contact.

Health Management Technologies

1042 Country Club Drive, Suite 2-C, Moraga, Calif. 94556; (415) 376-0980

PRODUCT: Return Disability Case Management
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
PRICE: $10,000
YEAR OF 1ST INSTALLATION: 1988
USERS: 60
PROFESSIONALS: 5
DESCRIPTION: The Return Disability Case Management's principal function is case management for workers' compensation, long- and short-term disability, provider management and cost control. Software can be bought with or without hardware. Telephone assistance is available 10 hours a day.

Jim Wolfe is client contact.

Health Risk Management

8000 W. 78th St., Minneapolis, Minn. 55439; (800) 824-3882

PRODUCT: Results PLUS
DESCRIPTION: The Results PLUS' principal function is analysis of medical claims data to identify controllable utilization and pricing patterns contributing to excessive benefit costs; it also recommends solutions and savings. Other functions or modules consist of Phase One — Data Quality Evaluation and Phase Two — Data Analysis. Telephone assistance is available eight hours a day. Branch offices are in Shrewsbury, N.J.; Chicago; and Glendale, Calif.

Liz Leahy is the client contact.

PRODUCT: Benefit Plan Modeling
HARDWARE: IBM or compatible
MINIMUM MEMORY: 640K
DESCRIPTION: The Benefit Plan Modeling's principal function is to calculate the financial impact of benefit plan changes using medical claims data (e.g. changes to deductibles, co-insurance, stop loss, mental health/chemical dependency plan limits. Telephone assistance is available eight hours a day. Branch offices are in Shrewsbury, N.J.; Chicago; and Glendale, Calif.

Liz Leahy is the client contact.

PRODUCT: Benecalc
HARDWARE: IBM or compatible
MINIMUM MEMORY: 640K
DESCRIPTION: The Benecalc's principal function is to prepare and provide medical claims data with utilization criteria and price norms for on-site reporting and analysis; it also identifies utilization, hospital and physician pricing patterns. Other functions or modules include menu of standard reports and ad hoc query facility for customized reporting. Telephone assistance is available eight hours a day. Branch offices are in Shrewsbury, N.J.; Chicago; and Glendale, Calif.

Liz Leahy is the client contact.

Hewitt Associates

100 Half Day Road, Lincolnshire, Ill. 60069; (708) 295-5000

PRODUCT: Future$aver
HARDWARE: IBM or compatible
MINIMUM MEMORY: 400K to 500K
YEAR OF 1ST INSTALLATION: 1989
USERS: 5
PROFESSIONALS: 15
DESCRIPTION: The Future$aver's principal function is to allow employees to calculate future retirement income from all sources. Software can be bought unbundled from hardware. Branch offices are nationwide.

Barbara Van Lieshout is the client contact.

PRODUCT: 415 Calc
HARDWARE: IBM mainframe and IBM PC or compatible
MINIMUM MEMORY: 512K
YEAR OF 1ST INSTALLATION: 1986
USERS: 50
PROFESSIONALS: 10
DESCRIPTION: The 415 Calc's principal function is to calculate one- and two-plan IRC Section 415 benefit limits. Maintains employee data base and produces documentation including audit and summary reports. Software can be bought unbundled from hardware. Branch offices are nationwide.

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1290 Avenue of the Americas
New York, NY 10104
(212) 408-2900

Monica Thompson and Jeff Dawson are client contacts.

PRODUCT: Social Security Calculator
HARDWARE: IBM or Burroughs mainframe and IBM PC or compatible
MINIMUM MEMORY: 256K
YEAR OF 1ST INSTALLATION: Mainframe: 1979; PC: 1984
USERS: 200
PROFESSIONALS: 150
DESCRIPTION: The Social Security Calculator's principal function is to calculate employee Social Security benefits. Software can be bought unbundled from hardware. Branch offices are nationwide.
Cathy Clemmer is client contact.

PRODUCT: Pension Administrator
HARDWARE: IBM mainframe or IBM PC/XT, AT or compatible
MINIMUM MEMORY: 640K
YEAR OF 1ST INSTALLATION: 1985
USERS: 108
PROFESSIONALS: 110
DESCRIPTION: The Pension Administrator's principal function is to provide total pension plan administration, including tracking day-to-day administration details; calculating pension benefits; producing management reports; and maintaining an employee database. Software can be bought unbundled from hardware. Branch offices are nationwide.
Barbara Van Lieshout is the client contact.

PRODUCT: Defined Contribution Plan Administration
HARDWARE: Mainframe: IBM; time sharing: none
YEAR OF 1ST INSTALLATION: mainframe: 1976; time sharing: 1976
USERS: 250
PROFESSIONALS: 265
DESCRIPTION: The Defined Contribution Plan Administration's principal function is record keeping for defined contribution plans, including savings, 401(k), profit sharing and ESOP plans. Software can be bought unbundled from hardware. Branch offices are nationwide.
Barbara Van Lieshout is the client contact.

PRODUCT: FlexSystem
HARDWARE: IBM mainframe or PC or compatible
MINIMUM MEMORY: 512K
YEAR OF 1ST INSTALLATION: 1983
USERS: 215
PROFESSIONALS: 150
DESCRIPTION: The FlexSystem's principal function is to administer all aspects of a flexible compensation program, including enrollment; reimbursement accounts; on-going administration; reporting to management and carriers; and maintaining an employee data base. Software can be bought unbundled from hardware. Branch offices are nationwide.
Barbara Van Lieshout is the client contact.

Insurance Software Packages Inc.

5118 N. 56th St., Tampa, Fla. 33610; (813) 621-6069

PRODUCT: ISP HealthStar
HARDWARE: 386 IBM compatible micro computer, Novell network
MINIMUM MEMORY: 3 MB RAM
PRICE: $35,000 to $45,000
YEAR OF 1ST INSTALLATION: 1986
USERS: 140
PROFESSIONALS: 40
DESCRIPTION: The ISP HealthStar is a fully adjudicating health benefits management system for self-insureds, TPAs and carriers. Its principal function is to handle medical, disability, dental and optical claims. A PPO module is offered. It verifies eligibility; automatically adjudicates claims; flags duplicate claims; and generates EOB, checks and vouchers. On-line claim inquiry, pended claims, letter manager and comprehensive reporting also offered. Other functions or modules include optional billing and commission modules; UCR cost containment module and lag analysis reporting. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day.
Monique Knox is the client contact.

Intex Solutions Inc.

161 Highland Ave., Needham, Mass. 02194; (617) 449-6222

PRODUCT: Intex Bond Amortization Program
HARDWARE: IBM PC, XT or compatibles
PRICE: $295
YEAR OF 1ST INSTALLATION: 1990
DESCRIPTION: The Intex Bond Amortization Program's principal function is to quickly produce a bond amortization schedule and calculate bond yield for tax and accounting purposes.
George Jigarjian is client contact.

PRODUCT: Intex Mortgage-Backed Calculations
YEAR OF 1ST INSTALLATION: 1989
DESCRIPTION: The Intex Mortgage-Backed Calculations' principal function is to automate complex mortgage-backed bond calculations, including quoted and cash flow yield and price, balance, principal, interest, duration and life. An advanced version handles adjustable-rate mortgages plus implied pre-payment, total return and bond-equivalent yield functions.
George Jigarjian is the client contact.

PRODUCT: Intex Options Price Calculations
YEAR OF 1ST INSTALLATION: 1989
DESCRIPTION: The Intex Options Price Calculations' principal function is to compute theoretical value, implied volatility, historical volatility, and the 'Greek' sensitivity values for options buyers and sellers. Date functions determine the appropriate option expiration date.
George Jigarjian is the client contact.

PRODUCT: Intex Bond Calculations
PRICE: Basic version: $395
YEAR OF 1ST INSTALLATION: 1989
PROFESSIONALS: 5
DESCRIPTION: The Intex Bond Calculations's principal function is to provide essential bond calculations including yield, price, duration, Macaulay duration, bond equivalent yield of a T-bill, accrued interest, price and yield on discount securities and other functions. An advanced version and international version also are available.
George Jigarjian is the client contact.

PRODUCT: TROLL
HARDWARE: IBM mainframes 937X, 43XX and 30XX Series or compatibles
PRICE: $8000 and up
YEAR OF 1ST INSTALLATION: 1990
DESCRIPTION: TROLL is an interactive decision support system for data base management; its principal function is to offer econometric modeling, forecasting, and statistical analysis. State-of-the-art modeling and forecasting, simulation, databanking, reporting and graphic features are offered.
George Jigarjian is the client contact.

Kwasha Lipton

2100 N. Central Road, Fort Lee, N.J. 07024; (201) 592-1300

PRODUCT: Defined Contribution Administration System
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K

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Agent, Underwriter and Serial Swap Counterparty

Chemical Realty Group acted as exclusive financial advisor in these transactions.

CHEMICAL BANKING Corporation
INVESTMENT BANKING

PRICE: $15,000 and up
YEAR OF 1ST INSTALLATION: 1987
USERS: 20
PROFESSIONALS: 40
DESCRIPTION: The Defined Contribution Administration System's principal function is to help companies organize, edit and transmit data that relates to their defined contribution plans. Other functions or modules maintain an employee data base of plan participants and their enrollment elections. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day.
R.T. Whitman is the client contact.

PRODUCT: Group Benefits Administration System
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
PRICE: $20,000 and up
YEAR OF 1ST INSTALLATION: 1989
USERS: 2
PROFESSIONALS: 20
DESCRIPTION: The Group Benefits Administration System's principal function is to fulfill all requirements for enrollment and through the year administration for group benefit plans, including flexible benefit designs. Other functions or modules maintain a separate employee data base. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day.
R.T. Whitman is the client contact.

PRODUCT: INTACT
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
PRICE: $15,000 and up
YEAR OF 1ST INSTALLATION: 1985
USERS: 2
PROFESSIONALS: 20
DESCRIPTION: INTACT's principal function is to allow individual employees to forecast the effects of employee benefit plan enrollment decisions. Other functions or modules include helping employees through flexible benefit enrollments and with retirement income planning. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day.
R.T. Whitman is the client contact.

PRODUCT: Defined Benefit Certification System
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
PRICE: $30,000 and up
YEAR OF 1ST INSTALLATION: 1984
USERS: 30
PROFESSIONALS: 40
DESCRIPTION: The Defined Benefit Certification System's principal function is to allow plan administrators to compute an employee's actual retirement benefits under a company's defined benefit plan. Other functions or modules allow user to forecast retirement benefits for employees nearing retirement and who want counseling. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day.
R.T. Whitman is the client contact.

William M. Mercer Inc.

1166 Avenue of the Americas, New York, N.Y. 10036; (212) 345-7000

PRODUCT: Allocation Express (ALEX)
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
YEAR OF 1ST INSTALLATION: 1989
USERS: 75
PROFESSIONALS: 150
DESCRIPTION: The ALEX's principal function is to provide comprehensive participant accounting for all aspects of defined contribution plan administration. Other functions or modules include communicating benefit programs to employees. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

PRODUCT: 415 Express
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
PRICE: $20,000
YEAR OF 1ST INSTALLATION: 1988
USERS: 50
PROFESSIONALS: 150
DESCRIPTION: The 415 Express' principal function is to test for compliance with Section 415 combined limits. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

PRODUCT: TestKey
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
PRICE: $3,000
YEAR OF 1ST INSTALLATION: 1987
USERS: 39
PROFESSIONALS: 150
DESCRIPTION: The TestKey's principal function is to perform discrimination tests in accordance with the Tax Reform Act of 1986. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

PRODUCT: Social Security Calculation System
HARDWARE: IBM mainframe and IBM PC or compatible
MINIMUM MEMORY: 640K
YEAR OF 1ST INSTALLATION: 1979
PROFESSIONALS: 150
DESCRIPTION: The Social Security Calculation System's principal function is to calculate OASDI benefits under Social Security law in effect at any time since 1975. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

PRODUCT: Pension Express (Benefit Calculation System)
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 3 MB
YEAR OF 1ST INSTALLATION: 1986
USERS: 100
PROFESSIONALS: 150
DESCRIPTION: The Pension Express Benefit Calculation System's principal function is to calculate plan-specific defined benefit pensions. Other functions or modules include communications with employees. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

PRODUCT: MasterKey
HARDWARE: Mainframe
YEAR OF 1ST INSTALLATION: 1984
PROFESSIONALS: 150
DESCRIPTION: MasterKey is a comprehensive participant accounting system for all aspects of defined contribution plan administration. Other functions or modules include employee communication. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

PRODUCT: LoanKey
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
PRICE: $10,000 complete
YEAR OF 1ST INSTALLATION: 1986
USERS: 100
PROFESSIONALS: 150
DESCRIPTION: The LoanKey's principal function is to administer loan provisions of any defined contribution plan. Other functions or modules include communicating benefit programs to employees. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

PRODUCT: FlexKey
HARDWARE: IBM mainframe or IBM PC or compatible or Wang VS
MINIMUM MEMORY: 640K
YEAR OF 1ST INSTALLATION: 1984
USERS: 86
PROFESSIONALS: 150
DESCRIPTION: FlexKey is a system for flexible benefit program enrollment, administration and reimbursement account processing. Other functions or modules include employee communication. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

PRODUCT: Mercer's TouchSource
HARDWARE: IBM PC, Video Disk Player, InfoWindow Monitor
MINIMUM MEMORY: 1 MB
YEAR OF 1ST INSTALLATION: 1989
PROFESSIONALS: 150
DESCRIPTION: Mercer's TouchSource is an interactive video disk system for flex enrollment, 401(k) modeling, company orientation and employee attitude surveys. Other functions or modules include benefit program communication to employees. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

PRODUCT: DataKey
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 640K
PRICE: $20,000 complete
YEAR OF 1ST INSTALLATION: 1987
USERS: 32
PROFESSIONALS: 150
DESCRIPTION: The DataKey's principal function is to collect and manage the flow of information in defined contribution plans; it streamlines the data gathering and plan administration processes. Software can be bought unbundled from hardware. Telephone assistance is available for eight hours on weekdays. Branch offices are nationwide.
Thomas T. Lonergan is the client contact.

Profiles of the nation's 200 largest pension funds will be published in the Jan. 21 edition.

P&W Software Inc.

5655 Lindero, Suite 403, Westlake Village, Calif. 91362; (818) 707-7690

PRODUCT: POWERPLUS
HARDWARE: IBM PC-AT, PS/2 or compatible
MINIMUM MEMORY: 640KB
PRICE: $12,500 (single company)
YEAR OF 1ST INSTALLATION: 1987
USERS: 41
PROFESSIONALS: 3
DESCRIPTION: The POWERPLUS' principal function is the administration of flexible benefit programs. Other functions or modules include employee record keeping flexible spending account administration; and discrimination testing. Software can be bought unbundled from hardware. Telephone assistance is available 14 hours a day.
Michael C. Wilson is the client contact.

Professional Computer Services

1 Civic Plaza, Suite 350, Carson, Calif. 90745; (213) 830-1072

PRODUCT: Defined Benefit Plan Administration System
HARDWARE: IBM compatible

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Mariefast AB, a Swedish Real Estate Development and Management Company
Cushman & Wakefield
1201 West Peachtree Street
Atlanta, GA 30309

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Cushman & Wakefield
424 Church Street
Nashville, TN 37219

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a 1.2 million square foot office building
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Cushman & Wakefield
5430 LBJ Freeway
Dallas, TX 75240

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Realtech Development & Construction Company
in the placement of
Participating First Mortgage Financing for
Maple Plaza
a 280,000 square foot office building
Beverly Hills, California
with
Teacher Retirement System of Texas
via their advisor
Investco Realty Advisors, Inc.
Cushman & Wakefield
515 South Flower Street
Los Angeles, CA 90017

CUSHMAN & WAKEFIELD
is pleased to announce
it represented
Aetna Life Insurance Company and **Lincoln Country Brook, a California Limited Partnership**
in the sale of
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a 416 unit apartment complex
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to
Ardenwood Development Associates
Cushman & Wakefield
555 California Street
San Francisco, CA 94104

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is pleased to announce
it represented
Faherty Keller Associates
in the placement of
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for the
Widener Building
a 485,000 square foot office building
Philadelphia, Pennsylvania
on behalf of
Widener Associates, LP
Cushman & Wakefield
Two Logan Square
Philadelphia, PA 19103

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is pleased to announce
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in the sale of
Plaza Square Shopping Center
a 104,000 square foot retail facility
Wayne, New Jersey
to
John Hancock Properties, Inc.
Cushman & Wakefield
One Meadowlands Plaza
East Rutherford, NJ 07073

CUSHMAN & WAKEFIELD
is pleased to announce
it represented
Martin Selig Real Estate
in the placement of
5 Year Term Financing for
Elliott Bay Office Park
a 230,000 square foot office building
Seattle, Washington
with
Equitable Life Assurance Society
Cushman & Wakefield
999 Third Avenue
Seattle, WA 98104

CUSHMAN & WAKEFIELD
is pleased to announce
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a 500,000 square foot office complex
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with
Heller Financial and **Fuji Bank, Ltd.**
Cushman & Wakefield
1875 Eye Street N.W.
Washington, DC 20006

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MINIMUM MEMORY: 512
YEAR OF 1ST INSTALLATION: 1964
PROFESSIONALS: 5
DESCRIPTION: The Defined Benefit Plan Administration System's principal function is complete plan administration. Software can be bought unbundled from hardware. Telephone assistance is available 10 hours a day.
Michael E. Smith is the client contact.

PRODUCT: Defined Contribution Plan Administration System
HARDWARE: IBM compatible
MINIMUM MEMORY: 512
YEAR OF 1ST INSTALLATION: 1964
PROFESSIONALS: 5
DESCRIPTION: The Defined Contribution Plan Administration System is a fully automated system for administration of defined contribution plans. Software can be bought unbundled from hardware. Telephone assistance is available 10 hours a day.
Michael E. Smith is the client contact.

PRODUCT: Health & Welfare Administration System
HARDWARE: IBM compatible
MINIMUM MEMORY: 512
YEAR OF 1ST INSTALLATION: 1964
PROFESSIONALS: 5
DESCRIPTION: The Health & Welfare Administration System is a welfare administration and claims adjudication system. Software can be bought unbundled from hardware. Telephone assistance is available 10 hours a day. Branch offices are in Carson.
Michael E. Smith is the client contact.

Pro*Systems Inc.

25100 Euclid Ave., Cleveland, Ohio 44117; (216) 731-2323

PRODUCT: Pro*Claims Processing Systems
HARDWARE: PC 386, Mini-(RISC), Mainf-(UNIX)
MINIMUM MEMORY: 4mb
PRICE: from $34,995
YEAR OF 1ST INSTALLATION: 1985
USERS: 20
PROFESSIONALS: 22
DESCRIPTION: The Pro*Claims Processing System's principal function is for employee health benefit administration. Other functions or modules include premium billing and accounts receivable. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day. Arlene Pelavin and Barry Komrich are the client contacts.

Resource Information Management Systems Inc.

P.O. Box 3094, Naperville, Ill. 60566-7094; (708) 369-5300

PRODUCT: QicClaim and QicClaim/2 Health Claims Management System
HARDWARE: runs on LAN, mini- or microcomputer platforms (Data General, Novell, Texas Instruments and Qantel Business Computers)
MINIMUM MEMORY: 4mb
YEAR OF 1ST INSTALLATION: 1982
USERS: 400
PROFESSIONALS: 35
DESCRIPTION: QicClaim and QicClaim/2's principal function is to provide automated solutions for the administration of employee health benefits programs. Other functions or modules include flexible spending, cost containment reporting, dental benefits management, PPO/HMO, prescription drug administration and managed care. Software can be bought unbundled from hardware. Telephone assistance is available 24 hours a day. Peter C. Reynolds is the client contact.

SBC Systems Corp.

30 Perimeter Center East, Suite 203, Atlanta, Ga. 30346; (404) 399-6321

PRODUCT: Defined Benefit Administration System
HARDWARE: IBM-PC compatible
MINIMUM MEMORY: 640K RAM
YEAR OF 1ST INSTALLATION: 1978
USERS: 15
PROFESSIONALS: 8
DESCRIPTION: The Defined Benefit Administration System's principal function is to act as a record-keeping system for employee retirement benefits. The system can be used to provide retirement estimates and projections, and also can perform actuarial valuations. Other functions or modules include report generation, an interface with human resource and payroll systems, and it can operate on a network. Software can be bought unbundled from hardware. Telephone assistance is available 12 hours a day.
Mary Ann Moser is the client contact.

PRODUCT: Defined Contribution/401(k) System
HARDWARE: IBM PC-AT compatible
MINIMUM MEMORY: 640K RAM
YEAR OF 1ST INSTALLATION: 1984
USERS: 20
PROFESSIONALS: 8
DESCRIPTION: The Defined Contribution/401(k) System's principal function is to handle 401(k), profit-sharing, money-purchase, thrift/savings, ESOPS and 401(b) and 457 plans. Other functions or modules include report generation, an interface with human resources and payroll systems, and it can operate on a network. Software can be bought unbundled from hardware. Telephone assistance is available 12 hours a day.
Mary Ann Moser is the client contact.

PRODUCT: Employee Communications System
HARDWARE: IBM PC-AT compatible
MINIMUM MEMORY: 640K RAM
YEAR OF 1ST INSTALLATION: 1990
PROFESSIONALS: 8
DESCRIPTION: The Employee Communications System's principal function is to provide annual comprehensive statements of employee benefits. User-defined text can be input to describe company benefit plans or generic information can be customized from system-supplied text. Other functions or modules include report generation, an interface with human resource and payroll systems, and it can operate on a network. Software can be bought unbundled from hardware. Telephone assistance is available 12 hours a day.
Mary Ann Moser is the client contact.

PRODUCT: Health & Welfare Administration System
HARDWARE: IBM PC-AT compatible
MINIMUM MEMORY: 640K RAM
YEAR OF 1ST INSTALLATION: 1986
USERS: 40
PROFESSIONALS: 8
DESCRIPTION: The Health & Welfare Administration System's principal function is to accommodate any type of flexible benefit plan. The system includes spending accounts, reimbursement processing, flexible credit formulas, and as many benefits and options as needed. Other functions or modules include report generation, an interface with human resource and payroll systems, and it can operate on a network. Software can be bought unbundled from hardware. Telephone assistance is available 12 hours a day.
Mary Ann Moser is the client contact.

PRODUCT: SBC-Talk
HARDWARE: IBM PC-AT compatible
YEAR OF 1ST INSTALLATION: 1990
USERS: 1
PROFESSIONALS: 8
DESCRIPTION: The SBC-Talk's principal function is to allow employees to use any touch-tone telephone to obtain answers to routine information requests. Custom scripts can be developed. Other functions or modules include interfacing with existing SBC systems or easy-to-use import mechanisms from any data base, payroll or human resource system. Software can be bought unbundled from hardware. Telephone assistance is available 12 hours a day.
Mary Ann Moser is the client contact.

SOTRISS Corp.

945 E. Paces Ferry Road, Atlanta, Ga. 30326; (404) 261-6313

PRODUCT: IS5 Health
HARDWARE: IBM RS/6000, AS/400, 3090
YEAR OF 1ST INSTALLATION: 1990
USERS: 3
PROFESSIONALS: 60
DESCRIPTION: The IS5 Health's principal function is administration and claims adjudication of medical, dental, vision, drug, LTD, STD, WC and long-term care benefit plans. Other functions or modules include PPO, utilization review, COBRA, ad hoc reporting, fund management and commissions. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day. Branch offices are in Chicago and Los Angeles.
The sales department in Atlanta is the client contact.

Emerging markets: March 4

Spectrum Human Resource Systems Corp.

1625 Broadway, Suite 2800, Denver, Colo. 80202; (303) 534-8813

PRODUCT: HR/2000
HARDWARE: IBM PC or compatible, MS or PC DOS
MINIMUM MEMORY: 640K RAM; 20mb hard drive
YEAR OF 1ST INSTALLATION: 1984
USERS: 2000
PROFESSIONALS: 70
DESCRIPTION: The HR/2000's principal function is to act as a PC-based human resource management system, including benefits tracking. Other functions or modules include COBRA tracking, extended benefits and flexible benefits/spending. Telephone assistance is available 10.5 hours a day.
Nancy Spoor is the client contact.

Stellar Software Inc.

19406 E. Floyd Ave., Aurora, Colo. 80013; (303) 680-9408

PRODUCT: Flex-Star
HARDWARE: IBM-PC or compatibles, 286 and 386 based machines, mini and mainframes
MINIMUM MEMORY: 640K
YEAR OF 1ST INSTALLATION: 1987
USERS: 15
PROFESSIONALS: 4
DESCRIPTION: The Flex-Star's principal function is to perform all tasks associated with the enrollment and administration of IRC Sec. 125 flexible benefit plans. Other functions or modules include survey, discrimination testing, check processing and all applicable reports. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day.
Otto F. Feiler is the client contact.

Stop Loss International Corp. - Select Software

3333 Founders Road, Indianapolis, Ind. 46268; (317) 876-4741

PRODUCT: ULTRAPLUS — Flexible Benefits Administration
HARDWARE: PCs or LANs
MINIMUM MEMORY: 640K
PRICE: $15,000
YEAR OF 1ST INSTALLATION: 1987
USERS: 12
PROFESSIONALS: 65
DESCRIPTION: The ULTRAPLUS' principal function is to enroll and administer all types of group insurance plans, including cafeteria plans, modular plans, flexible spending accounts, premium-only plans and core plans.
Other functions or modules include management reporting, insurance premium billing, and Section 125 discrimination testing. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. Branch offices are in Chicago, Dallas, Scottsdale, Kansas City, Atlanta and Philadelphia.
Joe C. Reppert is the client contact.

TPF&C

1500 Market St., Philadelphia, Pa. 19102; (215) 246-6000

PRODUCT: AccountManager
HARDWARE: MVS/XA compatible mainframe
MINIMUM MEMORY: 32mb
YEAR OF 1ST INSTALLATION: 1983
USERS: 80
PROFESSIONALS: 4,200
DESCRIPTION: The AccountManager's principal function is to perform administration, record keeping and reporting for all types for defined contribution plans. It handles all aspects of plan processing from plan set-up to reconciliation. It uses a relational data base and is parameter driven. Other functions or modules include on-line access; employee telephone access; and timesharing. Software can be bought unbundled from hardware. Telephone assistance is available 21 hours a day, Monday through Saturday; 18 hours on Sunday. Branch offices are worldwide.
Bob Stapley and Michael Hockersmith are the client contacts.

PRODUCT: FlexManager
HARDWARE: IBM PC/AT or compatible; 320mb hard drive
MINIMUM MEMORY: 4mb
YEAR OF 1ST INSTALLATION: 1987
USERS: 45
PROFESSIONALS: 4,200
DESCRIPTION: The FlexManager's principal function is to administer flexible benefits plans and/or flexible spending accounts. Other functions or modules include telphone enrollment; link to Lotus 1-2-3; and mainframe flex administration. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. Branch offices are worldwide.
Gloria Nofsinger is the client contact.

PRODUCT: PenCalc
HARDWARE: IBM-PC or compatible
MINIMUM MEMORY: 320K
YEAR OF 1ST INSTALLATION: 1974 (mainframe); 1985 (PC)
USERS: 116
PROFESSIONALS: 4,200
DESCRIPTION: The PenCalc's principal function is to perform pension and Social Security calculations for terminations, retirements and deaths. It calculates actual and estimated benefits, and generates estimates for pre-retirement counseling and open windows. Other functions or modules include the ability to produce worksheets, option election forms and personalized letters. It also can be integrated into PensionManager. Software can be bought unbundled from hardware. Telephone assistance is available from 9 a.m. to 5 p.m., Monday through Friday. Branch offices are worldwide.
Dick Clark is the client contact.

PRODUCT: PensionManager
HARDWARE: IBM PC or compatible
MINIMUM MEMORY: 2mb
YEAR OF 1ST INSTALLATION: 1986
USERS: 90
PROFESSIONALS: 4,200
DESCRIPTION: The PensionManager's principal function is to manage a data base of defined benefit and welfare plan information for active and inactive employees. It automatically links to payroll and human resources systems, and operates as a stand-alone system or in a LAN environment. Other functions or modules include creating custom reports, letters and benefit statements. Software can be bought unbundled from hardware. Telephone assistance is available 9 a.m. to 5 p.m., Monday through Friday. Branch offices are worldwide.
Dick Clark is the client contact.

PRODUCT: SSCalc
HARDWARE: IBM-PC or compatible
MINIMUM MEMORY: 320K

We are pleased to announce that

Larry Larkin

has joined our firm as

Senior Vice President

Leland O'Brien Rubinstein Associates Incorporated
Los Angeles

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Lake Oswego, Oregon • 97035
800-776-1046

YEAR OF 1ST INSTALLATION: 1974 (mainframe); 1984 (PC)
USERS: 290
PROFESSIONALS: 4,200
DESCRIPTION: The SSCalc's principal function is to calculate old-age, disability and survivor benefits as well as the maximum family benefit, using either estimated past earnings or actual earning histories. Other functions or modules include the ability to be integrated into PensionManager. Software can be bought unbundled from hardware. Telephone assistance is available 9 a.m. to 5 p.m., Monday through Friday. Branch offices are worldwide.
Theresa Schlussel is the client contact.

Travis Software Corp.
1001 S. Dairy Ashford 206, Houston, Texas 77077; (713) 496-3737

PRODUCT: Corporate COBRA Manager
HARDWARE: IBM-PC or 100% compatible with fixed disk
MINIMUM MEMORY: 512K
PRICE: $1,295
YEAR OF 1ST INSTALLATION: 1986
USERS: 2,281
PROFESSIONALS: 12
DESCRIPTION: The Corporate COBRA Manager's principal function is automatic printing of all COBRA related letters and forms, tracking of enrollment dates, billing and collection of premium to COBRA beneficiaries. Other functions or modules include a custom letter writer and custom report writer. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day.
Alan H. Williams is the client contact.

PRODUCT: Group Premium Billing System
HARDWARE: IBM-PC or 100% compatible with fixed disk
MINIMUM MEMORY: 640K
PRICE: $5,995
YEAR OF 1ST INSTALLATION: 1988
USERS: 28
PROFESSIONALS: 12
DESCRIPTION: The Group Premium Billing System's principal function is to bill premiums and report collections when a premium needs to be billed to employers who are provided group life, health, LTD and/or AD&D coverage by METs and associations. Other functions or modules include calculating commissions and printing commission checks. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day.
Alan H. Williams is the client contact.

PRODUCT: Retiree Premium Billing Manager
HARDWARE: IBM-PC or 100% compatible with fixed disk
MINIMUM MEMORY: 512K
PRICE: $1,295
YEAR OF 1ST INSTALLATION: 1987
USERS: 302
PROFESSIONALS: 12
DESCRIPTION: The Retiree Premium Billing Manager's principal function is to bill premiums and report collections for life and health benefit plans to retirees and those on leave of absence. Other functions or modules include calculating applicable premiums through use of age-rated tables. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day.
Alan H. Williams is the client contact.

PRODUCT: Travis-Flex
HARDWARE: IBM-PC or 100% compatible with fixed disk
MINIMUM MEMORY: 640K
PRICE: $1,295
YEAR OF 1ST INSTALLATION: 1987
USERS: 481
PROFESSIONALS: 12
DESCRIPTION: The Travis Flex's principal function is enrollment and administration of flexible benefit plans and flexible spending accounts. Other functions or modules include a custom report writer and a downloading module. Software can't be bought unbundled from hardware. Telephone assistance is available nine hours a day.
Alan H. Williams is the client contact.

WLT Software of Florida Inc.
24671 U.S. 19 North, Suite 460, Clearwater, Fla. 34623; (813) 797-7814

PRODUCT: COBRAPLUS
HARDWARE: IBM or compatible PC; operates in networks.
MINIMUM MEMORY: 640K
PRICE: $1,500
YEAR OF 1ST INSTALLATION: 1987
DESCRIPTION: The COBRAPLUS' principal function is Cobra administration and billing. It can generate automatic past-due and terminated notices and terminate for non-payment. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day.
Ann M. Brooks is the client contact.

PRODUCT: COMPCLAIMS Workers' Compensation Claims Administration System
HARDWARE: IBM or compatible PC with DOS 3.3 operating system; operates in networks.
MINIMUM MEMORY: 1 meg
PRICE: $15,000
YEAR OF 1ST INSTALLATION: 1983
DESCRIPTION: COMPCLAIMS' principal function is to act as a processing, payment and billing system for worker compensation claims. It provides automatic fee bill billing, extensive reporting and a letter writer. Other functions and modules include accommodating preferred provider processing, printing checks, 1099s and W2s with magnetic reporting to the IRS. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day.
Ann M. Brooks is the client contact.

PRODUCT: FLEXCLAIMS
HARDWARE: IBM or compatible PC with DOS 3.3 operating system
MINIMUM MEMORY: 640K
PRICE: $5,000
YEAR OF 1ST INSTALLATION: 1985
DESCRIPTION: The FLEXCLAIM's principal function is the administration of Section 125 plans; a complete fund accounting and payment system for flexible benefit plans. Other functions or modules include extensive reporting and a letter writer. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day.
Ann M. Brooks is the client contact.

PRODUCT: MEDICLAIMS Health Claims Administration System
HARDWARE: IBM or compatible PC with DOS 3.3 operating system; operates in networks.
MINIMUM MEMORY: 1 meg
PRICE: $35,000
YEAR OF 1ST INSTALLATION: 1981
DESCRIPTION: MEDICLAIMS' principal function is to provide processing and billing systems for medical, dental, vision, long- and short-term disability, flexible benefits, prescription drugs, PPO and reasonable and customary processing. It also includes COBRA administration. Other functions include extensive reporting and letter writer; prints checks, employee I.D. cards, and 1099s and W2s with magnetic reporting to the IRS. Software can be bought unbundled from hardware. Telephone assistance is available nine hours a day.
Ann M. Brooks is the client contact.

WTR Data Services
630 Third Ave., New York, N.Y. 10017; (212) 949-8989

PRODUCT: ADMINI*FLEX
HARDWARE: IBM PC or 100% compatible with at least 4mb free hard disk
MINIMUM MEMORY: 512K RAM
PRICE: $15,000 - $25,000
YEAR OF 1ST INSTALLATION: 1986
USERS: 17
PROFESSIONALS: 8
DESCRIPTION: The ADMINI*FLEX's principal function is to enroll and maintain flexible benefit options. Other functions or modules include the option to administer flexible spending accounts; phone enrollment is available. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. Branch offices are in Baltimore, Washington, Richmond, Indianapolis, and Philadelphia.
Michael Holden is the client contact.

PRODUCT: The Benefits Reporter
HARDWARE: IBM-PC or 100% compatible with at least 4mb free hard disk
MINIMUM MEMORY: 512K RAM
PRICE: $1,995
YEAR OF 1ST INSTALLATION: 1990
USERS: 3
PROFESSIONALS: 8
DESCRIPTION: The Benefits Reporter's principal function is to produce professional comprehensive benefit statements for employees, and benefit management reports for benefit managers. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. Branch offices are in Baltimore, Washington, Richmond, Indianapolis and Philadelphia.
Michael Holden is the client contact.

PRODUCT: MED*E*CALC
HARDWARE: IBM-PC or 100% compatible with at least 2mb free hard disk
MINIMUM MEMORY: 512K RAM
PRICE: $595
YEAR OF 1ST INSTALLATION: 1989
USERS: 30
PROFESSIONALS: 8
DESCRIPTION: The MED*E*CALC's principal function is to value and compare different types of health plans. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. Branch offices are in Baltimore, Washington, Richmond, Indianapolis and Philadelphia.
Michael Holden is the client contact.

PRODUCT: The Retirement Benefit System
HARDWARE: IBM-PC or 100% compatible with at least 4mb free hard disk
MINIMUM MEMORY: 512K RAM
PRICE: $10,000 - $20,000
YEAR OF 1ST INSTALLATION: 1986
USERS: 7
PROFESSIONALS: 8
DESCRIPTION: The Retirement Benefit System's principal function is to perform estimates and calculations for defined benefit pension plans. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. Branch offices are in Baltimore, Washington, Richmond, Indianapolis and Philadelphia.
Michael Holden is the client contact.

PRODUCT: WTR's Spending Account Module (SAM III)
HARDWARE: IBM-PC or 100% compatible with at least 3mb free hard disk
MINIMUM MEMORY: 512K RAM
PRICE: $3,500
YEAR OF 1ST INSTALLATION: 1986
USERS: 40
PROFESSIONALS: 8
DESCRIPTION: The SAM III's principal function is to administer flexible spending accounts from employee elections through check writing. Other functions or modules can be integrated into a full flexible benefit system. Software can be bought unbundled from hardware. Telephone assistance is available eight hours a day. Branch offices are in Baltimore, Washington, Richmond, Indianapolis and Philadelphia.
Michael Holden is the client contact.

Profiles of the largest pension funds: Jan. 21.

Taxes

Continued from page 17
lump-sum distributions that were subject to these flexible tax rules, according to a 1989 projection by the Employee Benefit Research Institute, Washington.

While EBRI estimates repeal of five-year averaging could generate approximately $1.4 billion annually in new revenue for Uncle Sam, that projection does not account for behavioral changes that might come about as a result of the stricter tax measures.

But some Senate staff members say legislation in this area is unlikely if it's a money loser for the government. Congress is awaiting official estimates on how the proposals would affect government revenue, but one staffer said the rollover rule changes might cost the government "in the $5 billion range" over five years.

Earlier this year, the simplification effort was stalled because of lawmakers' inability to agree on how to finance certain revenue losing provisions of the bill.

"Simplification is good, but the reality of the budget process is that we can't do anything that is very, very expensive," said Jeff Trinca, legislative assistant with Sen. David Pryor, D-Ark., who introduced the pension simplification legislation last summer.

But Thomas D. Terry, benefits tax counsel at the Department of Treasury said: "We believe there can be reasonable simplification without revenue loss." The department has made simplification of the distribution rules a top priority, Mr. Terry said.

In August, Sen. Pryor proposed the repeal of forward averaging rules as part of a package that would encourage participants to transfer tax-qualified retirement savings to other retirement vehicles rather than cash out. The proposal was part of the Employee Benefits Simplification Act (S. 2901) that was co-sponsored by Sen. Lloyd Bentsen, D-Texas, and Sen. Jim Jeffords, R-Vt.

Provisions of the legislation that dealt with pension distribution rules received support at an August congressional hearing from officials at the Department of Labor and at the Treasury Department, provided the changes were part of an overall package that was revenue neutral.

Under current law, plan participants who receive a distribution from a qualified plan cannot roll it over to defer taxes unless the distribution and the portion to be transferred equals at least 50% of their accounts' total assets.

For participants who wait until age 59½ to cash out their savings, the five-year forward average rules provide significant tax advantages.

"At the moment, that's a real tax break," said Henry von Wodtke, benefits consultant with Buck Consultants, New York.

Under the proposed legislation, the rules governing tax-free rollovers would be relaxed to allow employees to roll over any portion, no matter how small, of their tax-qualified distributions. Pre-retirement age distributions over $500 would be required to be rolled over, while five-year forward averaging rules would be eliminated.

In an analysis of the legislation prepared by Congress' Joint Committee on Taxation, the committee staff argued five-year forward averaging is not necessary under liberalized rollover rules.

"The original intent of the income averaging rules was to prevent a bunching of taxable income," the pamphlet said. "Liberalization of the rollover rules increases the flexibility of taxpayers in determining the time of the income inclusion of pension distributions, and eliminates the need for special rules to prevent bunching of income."

Some employers, however, view Congress' simplification effort as needless fiddling that will take flexibility from employees and discourage participation in retirement savings plans.

"There appears to be a carrot-and-stick approach," said Mark Ugoretz, president of the ERISA Industry Committee, Washington, referring to tax incentives to put money away, and restrictions on cashing out retirement savings. But, he said, "The carrot has shriveled and the stick has become a heavy club." ■

Cash

Continued from page 17
Cooper was the first major manufacturing company to adopt cash balance in July 1986.

"As an organization, we have a philosophical bent toward defined contribution plans and our first choice would have been to implement a defined contribution plan," he said. At the time, Cooper was integrating benefit plans of McGraw Edison Co., which was being acquired by Cooper.

He said Cooper wanted to retain some of the features of the existing defined benefit plans — such as early retirement subsidies and financing of long-term disability — but couldn't with a defined contribution plan.

The Cooper Industries cash balance plan covers 10,000 employees and has assets of more than $450 million, he said.

He said the plan "is one of the most appreciated benefits" offered by the company.

"With the cash balance plan, the fact that we are putting statements out on a quarterly basis and each paycheck stub contains the amount of credits earned, we are able to keep the pension plan in front of the employees on a regular basis. We have turned around the perception of our plan dramatically," he said.

Mr. O'Neill said the cost issue is "subjective" when discussing cash balance plans. "We look at it in a broader sense of what are we getting for what we pay. Without paying any more, we've got a program we're getting something from — a whole lot of employee appreciation."

Mr. O'Neill said it is "unfortunate" the cash balance plan is a defined benefit plan, "which is subject to all the defined benefit requirements coming out of Washington."

Kayser-Roth Corp., Greensboro, N.C., adopted its cash balance plan in 1989 by combining two defined benefit plans. Douglas Hartsell, director of benefits and compensation, said the company decided to switch following the passage of the Tax Reform Act of 1986.

Aside from the additional restrictions on pension plans in the tax bill, "another reason we liked it was while it is a defined benefit plan, it looks like a defined contribution plan to employees and we can provide very good plan communications," he said.

Mr. Hartsell said Kayser-Roth provides quarterly statements to employees on account balances, along with estimated account balances at ages 55 and 65.

He said projected pension costs will be the same as under the defined benefit plans, "but we didn't do it to save money. We did it to replace a benefit that needed to be replaced."

Kwasha-Lipton is the acknowledged leader in pioneering the cash balance plan and is promoting its expanded usage.

Norm Clausen, a Kwasha consultant, said costs associated with cash balance are determined by the level of benefits desired by the company and "the only way it can cost less is if you provide lower benefits."

Frequently, he said, cash balance plans are adopted for that reason by companies that believe their benefit packages are too rich or that costs associated with existing benefit levels are excessive.

When the company converts to cash balance, the employee communications problem associated with dropping one plan in favor of another is alleviated to some extent by the popularity of individual account balances and regular statements.

"Cash balance plans are appreciated by employees, but that is seldom the reason companies adopt cash balance. They adopt usually in order to cut back on benefit packages or expenses," Mr. Clausen said.

Mr. Clausen said the pace of cash balance plan adoption should increase more rapidly in the future.

"Growth has been occurring at a geometric rate and will grow even faster. To a large extent companies haven't been adopting cash balance because consultants have recommended against it. A lot of that is due to unfamiliarity with the concept . . . More consultants are becoming familiar with it now and are willing to recommend it. I wouldn't be surprised to see 50 more (plans adopted) next year and 100 the year after that." ■

TSA chosen by Daiwa as adviser for Japanese fund

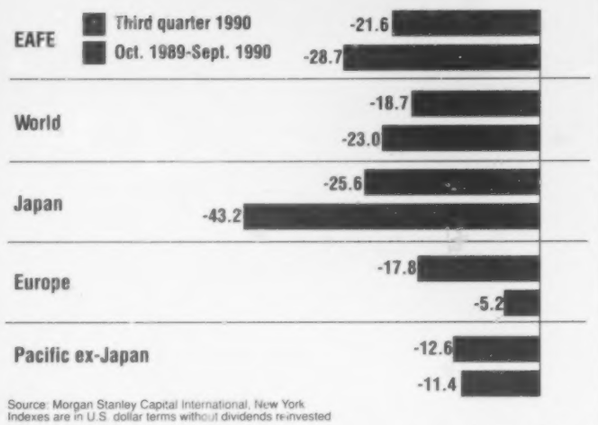
TOKYO — Daiwa Investment Trust and Management Co. Ltd. has chosen TSA Capital Management, Los Angeles, as investment adviser for a four-country global asset allocation fund for Japanese investors.

The fund uses TSA's quantitative asset allocation and active currency management models to shift exposure among stocks, bonds and cash equivalents in the United States, Japan, United Kingdom and Germany. TSA's recommendations are implemented in Tokyo by Daiwa Investment Trust, a subsidiary of Daiwa Securities Co. Ltd. Both physical securities and futures contracts are used.

The fund's assets amount to less than $50 million, TSA officials said; they declined to be more specific. Investors are primarily individuals.

TSA plans to work with Daiwa Investment Trust in designing and marketing jointly managed quantitative for U.S. institutional investors. ■

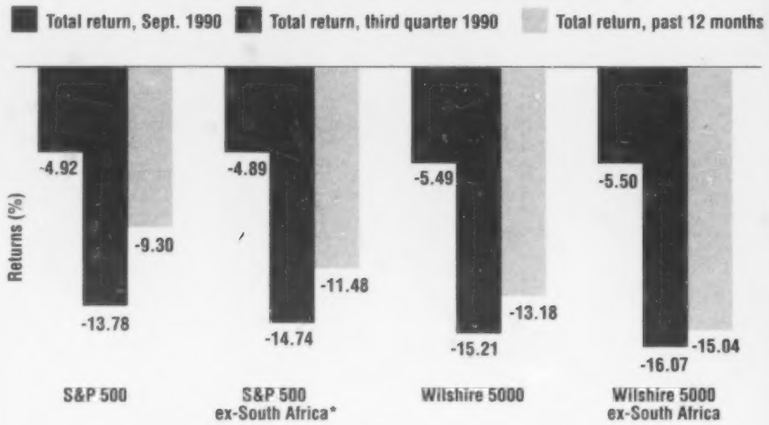
Morgan Stanley Capital International worldwide indexes



Source: Morgan Stanley Capital International, New York
Indexes are in U.S. dollar terms without dividends re-invested

Graphic by John Heiland

The South Africa Free Index



*Excludes stock of companies with an equity stake in a South Africa business, no replacements.

Source: Wilshire Associates, Santa Monica, Calif.

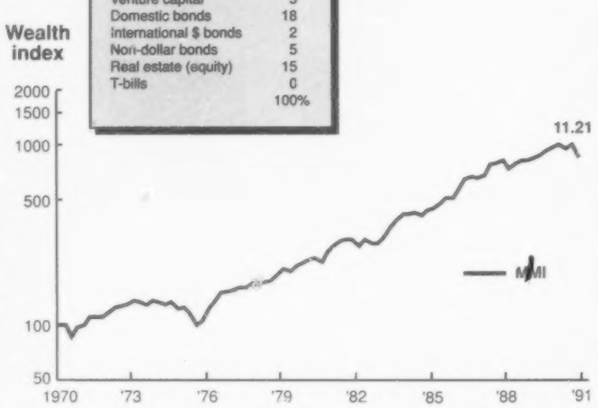
Graphic by Cynthia Watson

Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.

Weights	
Large-cap stocks	28%
Small-cap stocks	12
International stocks	15
Venture capital	5
Domestic bonds	18
International $ bonds	2
Non-dollar bonds	5
Real estate (equity)	15
T-bills	0
	100%

Five-year annualized return	12.29%
One-year return	-6.92%
Latest quarter	-8.98%



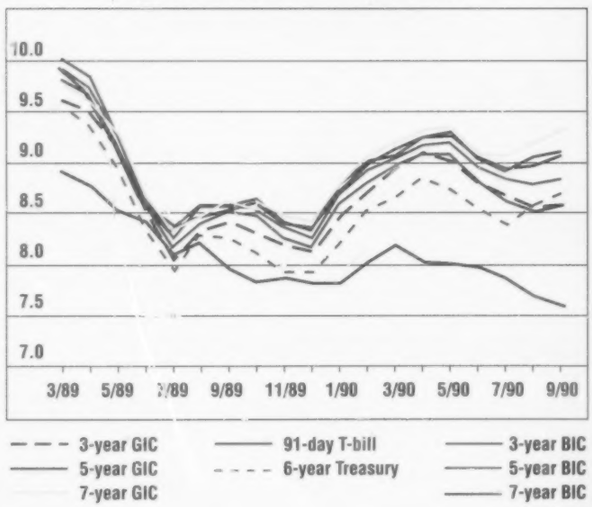
12/31/69 = 100
Data through 9/30/90

Source: Brinson Partners Inc., Chicago

Graphic by John Heiland

Summary of average GIC & BIC data vs. market yields

(Bullet, compound $1 million contract)



Source: William M. Mercer Asset Planning Inc.

Graphic by Cynthia Watson

Third quarter 1990 returns

	Russell 3000®	Russell 1000®	Russell 1000® by market capitalization				Russell 2000®
			Large	Medium/large	Medium	Medium/small	
Technology	-22.24%	-21.41%	-16.70%	-23.30%	-40.56%	-30.17%	-32.60
Health care	-9.28	-8.11	-8.13	-5.45	-6.81	-14.89	-25.43
Consumer discretionary	-23.74	-23.21	-22.92	-22.69	-22.82	-25.71	-29.61
Consumer staples	-9.39	-9.19	-8.64	-6.71	-17.51	-16.11	-20.31
Integrated oils	6.37	6.44	7.00	3.43	-0.29	-18.01	-19.54
Other energy	-3.66	-3.78	0.00	-6.67	-2.06	5.33	-2.37
Materials and processing	-17.32	-16.73	-19.66	-13.51	-16.66	-19.63	-22.49
Producer durables	-22.43	-21.84	-23.49	-19.68	-20.80	-27.22	-28.70
Auto and transportation	-24.22	-24.22	-24.92	-21.04	-27.39	-24.68	-24.28
Financial services	-25.52	-25.65	-25.07	-26.18	-25.44	-25.30	-23.38
Utilities	-8.19	-8.14	-8.36	-6.77	-10.81	-6.22	-10.37
Total	-15.17	-14.60	-10.42	-15.49	-19.44	-20.73	-24.54

Source: Frank Russell Co., Tacoma, Wash.

Rates on GICs inch up during 3rd quarter

By Fred Williams

Rates on guaranteed investment contracts increased slightly during the third quarter as quality spreads of GICs over Treasury instruments of similar maturities held relatively steady.

John Knight, president of Lamberson Knight Inc., a GIC brokerage in Short Hills, N.J., said rates were up "a little on the quarter, by about 35 to 40 basis points . . . with the three- to five-year maturities the strongest."

Mr. Knight said spreads "widened to some degree, partly due to the flight to quality" resulting from concerns over economic conditions and the threat of hostilities in the Middle East.

Mr. Knight said he has noticed some buyers looking to restrict their contract purchases to higher rated companies, both banks and insurance companies, with some willing to give up 10 to 15 basis points by staying with AAA rated companies rather than AA credits.

Quality spreads over comparable Treasuries ranged from 0.7% to 1.1% for shorter maturity GICs, with larger spreads on longer maturity contracts of 0.85% to 1.64%, according to Peter Bowles, president of Fiduciary Capital Management Inc., Woodbury, Conn.

Some GIC sources believe GIC spreads may tighten slightly during the remainder of 1990 because of the intensified competition by insurance companies for higher quality vehicles in which to invest GIC proceeds.

The following insurance company rate quotations on representative five-year, single-deposit, simple-interest, $1 million GICs were provided by Lamberson Knight and GIC Inc., Beaverton, Ore.:

- Allstate Life Insurance Cos., Northbrook, Ill.: Sept. 28, 9.06%; June 29, 8.99%.
- Bankers Life Assurance Co., Des Moines, Iowa: 8.64%; 8.[illegible]%.
- Canada Life Assurance Co., Toronto: 9.17%; 8.91%.
- CNA Insurance Co., Chicago: 9.01%; 8.6%.
- Confederation Life Insurance Co., Atlanta: 9.15%; 9.16%.
- Connecticut Mutual Life Insurance Co., Hartford: 8.87%; 8.92%.
- Continental Assurance Co., Chicago: 8.99%; 8.89%.
- Crown Life Insurance Co., Toronto: 8.88%; 9.03%.
- Hartford Life Insurance Co., Hartford, Conn.: 8.92%; 8.95%.
- John Hancock Mutual Life Insurance Co., Boston: 8.8%; 8.87%.
- Life Insurance Co. of Georgia, Atlanta: 8.8%, 8.95%.
- Life Insurance Co. of Virginia, Richmond: 8.92%; 8.91%.
- Lincoln National Life Insurance Co., Fort Wayne, Ind.: 8.96%; 8.92%.
- Massachusetts Mutual Life Insurance Co., Springfield: 8.67%; 8.82%.
- Mutual Life Insurance Co. of New York, New York: 9.04%; 9.02%.
- New England Mutual Life Insurance Co., Boston: 8.61%; 8.64%.
- New York Life Insurance Co., New York: 9.05%; 9%.
- Northwestern National Life Insurance Co., Minneapolis: 8.97%; 8.94%.
- Ohio National Life Insurance Co., Cincinnati: 9.2%; 9.1%.
- Pacific Mutual Life Insurance Co., Newport Beach, Calif.: 8.33%; 8.26%.
- SAFECO Corp., Seattle: 9.15%; 9.22 (June 12).

William M. Mercer Asset Planning Inc., Deerfield, Ill., surveys insurance companies for rate quotations and provided the following summary of various bullet GICs for September 1990:

- Three-year, $1 million, compound: high, 8.97%; low, 7.89%; average, 8.61%.
- Three-year, $1 million, simple: high, 8.97%; low, 7.9%; average, 8.58%.
- Five-year, $1 million, compound: high, 9.47%; low, 8.36%; average, 9.1%
- Five-year, $1 million, simple: high, 9.85%; low, 8.34%; average, 9.05%.
- Seven-year, $1 million, compound: high, 9.75%; low, 8.65%; average, 9.37%.
- Seven-year, $1 million, simple: high, 9.8%; low, 8.69%; average, 9.28%.
- Three-year, $5 million, compound: high, 9.02%; low, 8.22%; average, 8.68%.
- Three-year, $5 million, simple: high, 9.02%; low, 8.2%; average, 8.65%.
- Five-year, $5 million, compound: high, 9.47%; low, 8.65%; average, 9.15%.
- Five-year, $5 million, simple: high, 9.45%; low, 8.62%; average, 9.1%.
- Seven-year, $5 million, compound: high, 9.8%; low, 8.75%; average, 9.43%.
- Seven-year, $5 million, simple: high, 9.8%; low, 8.75%; average, 9.34%.

Schmidt Management Co., a GIC market research firm in Tulsa, Okla., has developed a guaranteed product performance measurement index. The Schmidt GIC composite index approximates the return of a continuous, equally weighted investment in one- to 10-year original-maturity GICs (The index shows returns, not rates).

Total returns for the quarter and 12 months ended Sept. 30 were 2.3% and 9.7%, respectively. In comparison, the Standard & Poor's 500 Stock Index returned −13.7% and −9.3%; the Merrill Lynch Government/Corporate Bond Index returned 3% and 6.6%; and 91-day Treasury bills, 1.9% and 7.9%.

Mercer also surveys banks for rate quotations on their guaranteed instruments. Rate quotes for one- and three-year bullet BICs for September were:

- One-year, $1 million, compound: high, 8.41%; low, 7.5%; average, 7.97%.
- One-year, $1 million, simple: high, 8.41%; low, 7.5%; average, 8%.
- Three-year, $1 million, compound: high, 8.91%; low, 8.35%; average, 8.59%.
- Three-year, $1 million, simple: high, 0.08%; low, 8.35%; average, 8.66%.
- One-year, $5 million, compound: high, 8.47%; low, 7.5%; average, 8%.
- One-year, $5 million, simple: high, 8.47%; low, 7.5%; average, 8.06%.
- Three-year, $5 million, compound: high, 8.95%; low, 8.19%; average, 8.6%.
- Three-year, $5 million, simple: high, 9.11%; low, 8.35%; average, 8.68%. ■

Writedowns

Continued from page 2

them fast enough in the view of some consultants and advisers.

A top executive with a major real estate advisory firm, who declined to be identified, said he is telling his pension clients to watch for sharp writedowns to be announced in the coming months by managers with high concentrations of holdings in the Northeast.

"Nobody likes to admit values are going down. It takes people a while to reach acceptance," said Theodore M. Leary Jr., a principal with the real estate advisory firm Lowe Enterprises Inc., Los Angeles.

What is happening in the Northeast will be a shock for many pension funds, said Mr. Leary. "The Northeast has been experiencing 10 to 15 years of growth, and generally it has never experienced drops in values or foreclosures."

It is the big bank problems in the Northeast that will force reality on the pension real estate advisers, said Mr. Leary. "Bank examiners who were in Texas and Colorado are now coming to the Northeast telling banks a $10 million property is not worth $8 million, but $5 million instead."

Three major banks — Citibank, Chase Manhattan Bank and Bank of New England — have an estimated $5.6 billion in problem real estate loans.

While regulatory action is forcing banks into quick acceptance of writedowns, acceptance "for pension funds may take longer because no regulators are driving it," said Mr. Leary.

Some real estate advisers also might resist recognizing falling property values, said Mr. Barthell.

"Let's look at what the impact of reappraising is on that fund manager. One, he has less assets under management. Does that impact his pocketbook? I think so," Mr. Barthell said. Downward appraisals also hurt the track record and reputation, he said. "There is a domino effect, and (real estate advisers) don't want to set off that domino — or maybe they can make it a bunch of little dominoes."

While writedowns on Northeast properties are "overdue," they will happen, predicts Mr. Barthell. "The triggering effect is going to come when the funds say to their fund managers, 'I now there is something wrong with this picture. I know the Northeast is in trouble, but you are telling me I have had no decrement to value.' "

Charles R. Lightner, a senior vice president with Prudential Real Estate Investors, Newark, N.J., said Prudential's $3.5 billion PRISA I open-end fund already has taken some writedowns, including some as high as 15% to 20% during the past 12 months for some of the fund's small hotels in the Northeast.

PRISA I has about 12% of its assets in hotel properties, he said.

He also said there has been no gain in appreciation for some of the fund's larger properties, including those where Prudential has made multimillion-dollar improvements. The lack of appreciation in properties where improvements were made means those holdings have suffered depreciation.

Mr. Lightner contends PRISA properties are marked to market. Unlike some other advisers, Prudential uses about 45 independent appraisers. In addition, properties valued at more than $100 million are appraised every quarter, while those valued between $50 million and $100 million are appraised every other quarter.

Mr. Lightner offered some qualifications. He said there aren't many properties being sold in the Northeast now so it is difficult for appraisers to get enough sales data for accurate valuations.

Problems in the Northeast are coming at a time when the real estate appraisal process is one of the most controversial topics among pension investors, said Nori Gerardo, a consultant with Pension Consulting Alliance, Glendale, Calif.

Sylvia Farrell-Jones, senior investment officer for real estate with the $8 billion State of Connecticut Trust Funds, Hartford, said appraisals have been lagging property price moves not just in the Northeast, but all over the nation and for as long as the appraisal problem has been in existence.

Many view it as a problem in the Northeast now, she said, because property values in many instances are moving down and management fees are tied to the lagging appraised values.

Money managers have been accused by some pension officers and consultants of waiting too long to write down properties after values fall.

She said she and many other pension officers don't know the complete solution to the appraisal problem, but some pension funds have been moving in the direction of performance-based fees, in part to deal with lags in the current appraisal process.

According to pension consultants, performance fees can be arranged where a pension fund would pay lower up-front or front-end management fees and higher subsequent or back-end fees if warranted.

The back-end fees presumably would allow enough time for the appraisal process to catch up true values. Or, the performance fee could be paid when the property is actually sold.

Ms. Gerardo agreed performance fees can be used to grapple with the lag in appraisals, but she also noted plan sponsors "by and large" don't complain when property values rise and money managers are "under compensated" because of the lagging effect of the appraisal process.

Some pension officers have questioned whether appraisals done by real estate advisers are completed in a fashion they need to get an accurate picture of values.

A few pension plans have considered using outsider appraisers, or like the $57 billion California Public Employees' Retirement System, Sacramento, have stipulated what information it needs in its real estate adviser and appraisal reports. ■

Reversion

Continued from page 2

plans in Australia with about $1.73 billion in assets.

Westpac management claimed the fund had been the subject of an actuarial review, which found a $770 million surplus.

The review was confirmed by an independent actuary early in 1989 before Westpac went on a "contribution holiday" with the cessation of employer contributions to the fund; participants continued to make contributions.

Six months ago, bank officials and fund trustees agreed to divide the fund's surplus by using $230 million to increase members' benefits and transferring $250 million to the bank. The remainder would remain in the fund as surplus. The transfer added $152 million to Westpac's net profit of $526 million for the year ended Sept. 30 and enabled the bank to maintain its previous year's interim dividend of 52 cents per share in the face of a 39% decline in net profit from the previous year.

Mark Lynch, a union spokesman, said it was not right for the bank to transfer the participants' money in that way.

"The superannuation scheme was established for the benefit of the members. Any surplus is a surplus which arises out of the funds held on trust for the members," he said.

Mr. Lynch claimed a majority of participants had not been aware of the surplus/benefit increase trade-off until the bank released its half yearly profit results in September. Several members complained, urging the union to take legal action.

Westpac, in a statement issued by its legal representatives, stated both the bank and trustees had given "careful consideration to the proposal" and had sought thorough legal and actuarial advice before implementing the amendments.

Westpac claimed it would vigorously defend its actions as "both legally and ethically correct."

Four of the eight trustees are bank employees and are elected by members of the pension fund, two are Westpac directors and two are senior bank officers.

While the litigation will inevitably thrash out some crucial issues in the development of pension plan design in Australia, it is questionable as to how the existing members can stand to benefit from the court proceedings.

At best, should the union win the case, the surplus would be transferred back to the fund rather than used to increase benefits. The initial $230 million set-aside for benefit improvements has been frozen pending a legal resolution.

A key point in the case appears to lie in the existence of a provision in the original trust deed preventing the transfer of surpluses back to the employer. If this was unlawfully removed, then it would render the ongoing amendments also illegal.

The details of the original trust deed have not been made public.

The case is expected to clarify whether an Australian employer is obliged to act in the members' interests in any amendments to the trust deed relating to a surplus. ■

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December 24, 1990

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Pensions & Investments

The Newspaper of Corporate and Institutional Investing

$8 An Issue / $127 A Year

AT DEADLINE

CPI helps Macy funding

In a move geared in part toward protecting its realty holdings, Corporate Property Investors agreed to provide about 9% of a $188 million infusion of equity capital to R.H. Macy & Co. so the retailer can buy back junk bonds.

CPI purchased about $8.2 million of the Series III preferred stock for $31.81 per share. Subject to certain approvals, CPI also will buy about $13.1 million of the Series II preferred at the significantly higher price of $159.02 per share.

CPI runs nearly $3 billion in U.S. institutional real estate assets and owns 11 malls in which Macy has stores; the firm also holds $15 million in preferred Macy stock.

Hineman to quit Texas fund

Bruce Hineman, executive secretary of the $23 billion Teacher Retirement System of Texas for the past 10 years, will retire Aug. 31 to become the first executive director of the National Council on Teacher Retirement.

Proxy reform cautioned

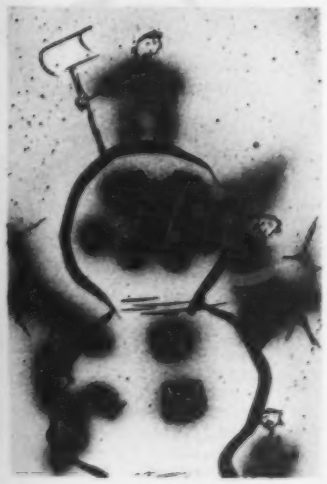
In a letter to the Securities and Exchange Commission, the Business Roundtable said the proxy reforms many institutional investors are seeking would lead to "back-room control" of proxy voting and undermine the already shaky confidence of individual investors in the market.

Emerging markets fund set

Rogers, Casey & Associates has developed a commingled group trust to invest in developing markets around the world.

The trust already has one investor, the $10 billion U S WEST Inc. pension fund. U S WEST played a role in structuring the fund.

INSIDE



Investors frosty to IPOs

Despite the inaugural hype and hoopla surrounding initial public offerings, during the 1980s investors' enthusiasm for the financing tool cooled as their investment values often melted away. In Commentary, page 14.

Photo by Michael Marrotte

Eastern Air Lines' unfunded pension liabilities is just one of the risks looming for the PBGC.

Recession imperils PBGC

Slump lifts odds of facing $7 billion in claims

By Joel Chernoff and Hillary Durgin

WASHINGTON — The slumping economy is increasing the chances the Pension Benefit Guaranty Corp. will be hit with claims of $7 billion to $8 billion, largely from the airline, steel and automotive industries.

While attention is focused on Continental Holdings Inc.'s Chapter 11 filing, which may saddle the PBGC with hundreds of millions of dollars in Eastern Air Lines Inc. pension liabilities, high oil prices and the worsening economy are starting to take their toll on highly cyclical, capital-intensive companies.

As more companies hit the skids, the PBGC may get stuck with their pension liabilities. Although agency officials decline to name them, the companies on the "watch list" are believed to include Pan Am Corp., CF&I Steel Corp. and Chrysler Corp.

James B. Lockhart III, the PBGC's executive director, said the agency expects to post a loss for fiscal 1990, which ended Sept. 30, as it likely will book losses for Eastern's Oct. 5 termination and other probable claims, as well as suffering negative investment returns.

"We've got these very big potential losses that are very hard to control," Mr. Lockhart said.

Less than two months after the PBGC thought it successfully had gotten Continental to agree to pay off the vast majority of Eastern's $700 million pension underfunding, the Houston-based airline holding company and subsidiaries filed Dec. 3 for protection from creditors, citing high fuel costs and heavy debt burdens.

It wasn't supposed to be that way. Under a novel Sept. 18 arrangement terminating seven Eastern pension plans, Eastern had agreed to pay $30 million to the PBGC and give it an unsecured claim of $50 million in Eastern's own Chapter 11 proceeding. Continental and its affiliates agreed to pay any of the remaining underfunding — for both

See **PBGC** *on page 26*

New rule increases flexibility

By Joel Chernoff

WASHINGTON — The Department of Labor has drafted a new rule that would give vastly more investment flexibility to individually directed defined contribution plans but impose a greater fiduciary burden on employers.

The new proposal, which radically overhauls a 1987 version, is expected to alleviate concerns over employers' ability to offer guaranteed investment contracts and employer stock investment options.

The rule would implement section 404(c) of the 1974 Employee Retirement Income Security Act, which defines how employers could escape fiduciary liability for investment decisions made by plan participants in individual account plans, such as many 401(k), money purchase and profit-sharing plans.

The new version, which was expected to be sent to the Office of Management and Budget for review last week, would abandon the more restrictive approach of the 1987 proposal that was withdrawn last summer.

The department will propose three broad principles that employers would have to follow to avoid fiduciary liability:

- Employers would have to provide "a broad range of investment alternatives" — including at least three diversified investment categories with different risk and return characteristics;
- participants must be able to switch their investments not less frequently than once every three months; and
- participants must have the opportunity to diversify investments generally and within in-

See **404(c)** *on page 30*

Unions begin look for overseas label

By Margaret Price

Although the issue is incendiary, more Taft-Hartley pension funds are exploring offshore investing in various forms — a trend that is expected to gain steam through the 1990s.

To date, few Taft-Hartley pension funds have invested outside the United States. The reasons for forgoing foreign markets centered on fears of exporting jobs and concerns about the safety of overseas investments.

But two main factors — recognition of the increasingly global nature of the world's economy, and appeals for foreign investments in such emotionally favored locales as Poland, home of Solidarity — are eroding unions' traditional barriers against foreign investing.

Increasingly, funds such as the Midwest Operating Engineers Pension Trust Fund and the Amalgamated Clothing and Textile Workers Union pension fund are considering investing beyond U.S. shores.

According to several sources, the Sheet Metal Workers' National Pension Fund, Washington,

See **Unions** *on page 30*

AP/Wideworld Photos

The need for capital in Poland, a sentimental favorite among unions, may lure some Taft-Hartley pension funds into the international investing arena.

NEWS DIGEST

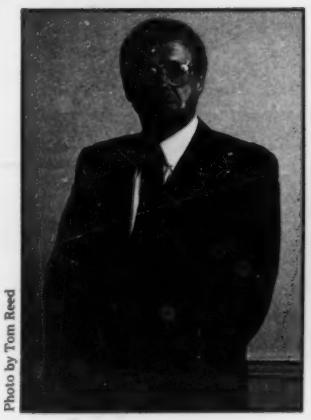


Photo by Tom Reed

Paul Quirk, executive director of the Massachusetts PRIM Board has severed his connections with a USX shareholders group led by Carl Icahn after the board voiced concerns about conflict of interests. Page 4.

SPECIAL REPORT: INVESTMENT OUTLOOK

***P&I*'s year-end roundtable** brought together five chief investment officers to discuss the investment outlook for various assets and markets as well as weigh the impact of developments worldwide. Page 3.

Dozens of investment managers also were surveyed on their opinions of what to expect in the coming year and how to invest accordingly. Page 3.

FINANCING

Monarch Capital and Equitable Life, two cash-strapped insurance companies, are pursuing different paths in their attempts to raise capital. Page 6.

GE Capital is among four financial companies that have teamed up in a venture seeking to raise $250 million for investment in the Asia-Pacific region. Page 2.

INTERNATIONAL

Taft-Hartley pension funds, once ardent isolationists when it came to investments, increasingly are exploring opportunities in the international arena. Page 1.

Wardley Direct Investment Management announced plans for a second fund for direct investments in unlisted Southeast Asian firms. Page 8.

REAL ESTATE

Goldman, Sachs finds selling the Philadelphia Stock Exchange building, the last holding in the firm's Institutional Assets commingled fund, a tough sell. Page 2.

Realty Capital Advisors sees commercial realty opportunities waiting to be reaped in the markets of the Midwest. Page 8.

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The *Pensions & Investments* staff wishes our readers a happy holiday season and healthy, prosperous 1991.

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DEPARTMENTS

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Scoreboard questionnaires due

The deadline is approaching for *Pensions & Investments*' annual Money Manager Scoreboard. Questionnaires must be returned by Dec. 31 to be included in the rankings. If your investment management firm has not yet received a questionnaire, or if you have questions on it, contact Christine Philip, directory coordinator, at (312) 649-5217.

The Philadelphia Stock Exchange, InProp's only remaining property, has proved to be a tough sell for Goldman, Sachs & Co.

Change proposed

Goldman wants to bench itself

By Steve Hemmerick

Goldman, Sachs & Co., one of the nation's leading real estate financial service and brokerage firms, has suggested replacing itself as an investment manager of its languishing, almost defunct, real estate commingled fund.

The fund, Institutional Property Assets, or InProp, has only one remaining property — the Philadelphia Stock Exchange building. Yet, Goldman's difficulties in selling the building, as well as the fund's other holdings during the past four years, have some investors disgruntled.

Some investors have expressed surprise and annoyance at how long Goldman has struggled to sell the Philadelphia building — especially in view of the firm's worldwide reputation as a leading brokerage and investment banking house. Investors have been paying a 1.25% fee annually on invested assets.

Some critics also fear the Philadelphia building has been losing value as they wait for the sale.

Goldman officials declined to comment. According to pension fund executives, however, Goldman officials claim they have acted prudently. Because of eco-

See **Goldman** *on page 31*

City fund hit hard by losses

By Trudy Ring

MINNEAPOLIS — The $787 million Minneapolis Employees' Retirement Fund, under new administration, has taken write-downs on about $43 million in venture capital and real estate investments.

Fund officials called the investments "troubled" and part of an unusually high allocation to those asset classes.

The fund also has moved $180 million to index funds and commissioned asset allocation studies for its two separate portfolios, a $230 million one for active employees and a $557 million one for retirees.

At a Dec. 18 meeting, the fund's board approved writing down the market value of eight venture capital and real estate investments that James Hacking, executive director and chief investment officer, says are in trouble. These are all held in the active employees' portfolio.

The active employees' fund invested about $39 million in the enterprises, which include a fish-farming company, a motion picture company and commercial real estate. It wrote down the market value to about $12 million.

Mr. Hacking's predecessor, John Chenoweth, contended it is unfair to characterize the investments as troubled; they all have

See **Losses** *on page 31*

Investors to bankroll Asian firms

By Marcia Parker

Four major global financial service industry players have teamed up as the founding investors of an investment company that will take equity stakes in the best and brightest companies in the Asia-Pacific region. And they are looking for institution partners with deep pockets.

The founding investors of CEF New Asia Co., Hong Kong, who put up $100 million in capital, are GE Capital Corp., Canadian Imperial Bank of Commerce, Hong Kong's Cheung Kong (Holdings) Ltd. and Japan's Nikko Securities Co. Ltd. All of these institutions have had long-standing relationships in other investments in the past.

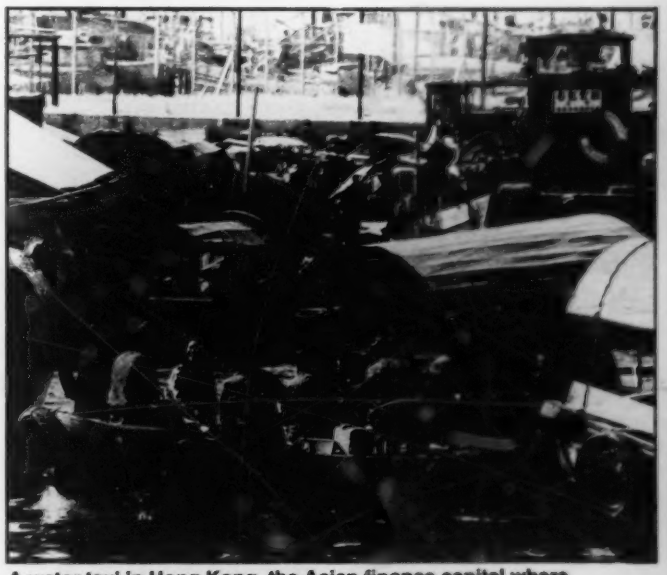
CEF New Asia is sponsored by CEF Holdings, a leading merchant banking group in Hong Kong. The investment company has just begun to try to raise $250 million from institutional investors in the United States and overseas.

More institutional investors are exploring corporate finance-oriented investments, including private equity capital funds targeting U.S. and European companies. While there are several such funds in the Asia-Pacific area and a smattering in other emerging markets, those limited partnerships are much smaller, often less than $50 million. If the CEF sponsors raise the $250 million they hope for, it will be the largest private equity fund in the Asia-Pacific region.

S. Steve Chu, managing director with CEF New Asia, said a large fund will allow the group to make sizable investments and take on bigger deals. Andrew Leach, the finance director, said the first deal, involving a Taiwan company, could be closed by year end.

The fund will purchase equity stakes in public and private companies with the objective of having the group provide a high degree of influence over management, financial structure and strategic direction. In most cases, the group will seek board representation. Investments will be made with a view to liquidation in two to five years.

CEF Holdings is owned equally by the Cheung Kong group and the Canadian Imperial Bank of Commerce and provides a broad range of financial services throughout the region. ■



A water taxi in Hong Kong, the Asian finance capital where investors hope to raise the largest Pacific Rim private equity fund.

IPOs a 'junk' investment of the 1980s

By Porter K. Wheeler

Initial public offerings always attract wide interest from investors, but the fact is these investments performed poorly in the 1980s. I recently studied the performance of more than 3,000 IPOs of corporate stock issued between 1980 and 1989. My finding: Buying stock in start-up companies was a losing investment about 75% of the time.

That's bad news for pension funds, money managers and other investors in IPOs. Like junk bonds, IPOs are another one of those securities where investors expect compensation of above-average returns for assuming above-average risk.

An investment manager might expect to enhance performance through judicious diversification of IPOs. With too few exceptions, all investors have gotten in the 1980s was the glamour of being in on the ground floor of a newly public company. Nearly half of the stocks of the companies that went public in the decade, in fact, aren't even traded today.

That's bad news, too, for the supply of capital for business. IPOs are an important source of equity capital in the economy and ought to play a significant role in the transfer of private savings to the entrepreneurial sector, financing new and emerging business activities. Sale of stock enables these new companies to expand and develop their technologies and markets without the financial constraints of excessive debt.

In recent years, however, IPOs have been slipping as a source of equity capital. Indeed, much of the IPO money raised since mid-1987 has gone into closed-end bond and equity funds. Excluding those closed-end funds, IPOs raised less equity capital than limited partnerships in recent years. In 1988 and 1989, limited partnerships raised $19 billion, while IPOs, excluding the closed-end funds, raised $9 billion.

What should be done if IPOs are to continue as an important source of financing? Some key findings of the study provide a perspective for framing a solution.

In the 1980s, there were 3,186 IPOs that met my working-company-oriented criteria (which exclude closed-end funds and some other types of offerings). These IPOs raised $55.1 billion.

Of the IPOs issued in the decade, only 58% were priced on a national market at the end of 1989 and only 33% had a market value above their issue price.

For those IPOs with current prices (58% of the total), an investment in each one from its issue to the end of 1989 would have produced a profit for 57% of the issues (33% of the total) and a loss in the other 43%.

The Standard & Poor's 500 Stock Index returns were higher than IPO returns on average for eight of the 10 years. Of the IPOs having a current price, 75% have underperformed the S&P 500 market average from the date of issue through 1989.

So what's happened to those IPOs that "disappeared," that is, those without any current pricing on a national market? Based on a sample of 103 of these IPOs and using data on regional-market pricing and other information, I found these issues, including the effect of known mergers and acquisitions, performed even worse than the IPOs nationally priced.

Only 14% of these unpriced IPOs showed gains from their issuance to their last known prices.

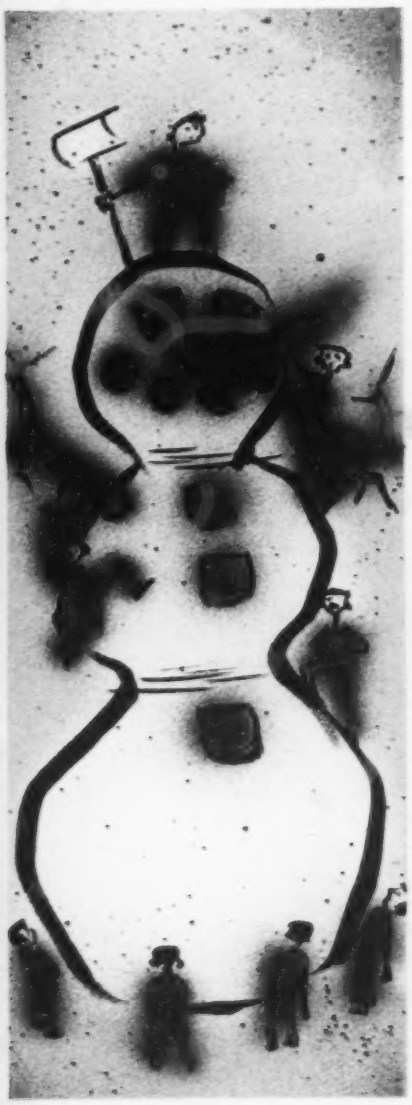
Investors, in short, haven't been rewarded for taking the risks inherent in these new and emerging businesses. In the past three years, fewer new offerings are forthcoming and less and less money is being raised. If IPOs are to continue as an important source of financing, investors will need a reasonable expectation of reward for their risk.

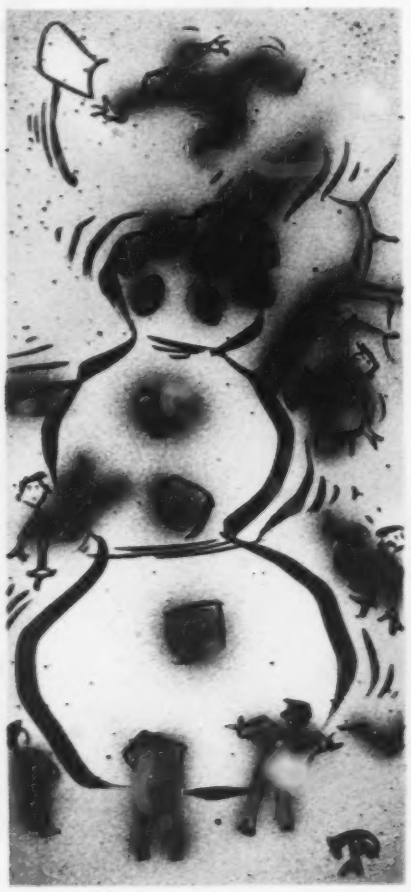
The quality of IPOs cannot be guaranteed, but more responsibility for these offerings must be shouldered by the selling group, the regulators and the issuer. Setting lower offering prices would be a good start. The selling group needs to perform adequate due diligence to assure itself that trends and timing within the new business are good for investors and not just good for marketing the issue.

The Securities and Exchange Commission needs to rethink its approach on new issues. A more intelligible prospectus would help, one better serving investors' interests rather than the legal protection of the issuers. The SEC should consider IPO trading restrictions, or even a no-trade period to reduce price volatility. It should require more disclosure of insiders' holdings and their selling plans, both current and prospective.

Of course, investors still have to do their own research and, based on the evidence, research more thoroughly. ■

Porter K. Wheeler is chief economist and senior vice president of The Jefferson Group, Washington.





Illustrations by Joe Fournier

Hooray for recession?!

By Roger Engemann

When corporate earnings fall, the stock market drops.

Recessions are always bad for the stock market.

Both statements appear to be logical deductions. They are, however, stock market myths, myths that could cause investors to miss out on major investment opportunities.

Take myth No. 1: Does the stock market decline when corporate earnings fall? More often than not, the opposite is the case. Historically, stocks have performed well during periods when corporate profits have fallen, as Table 1 demonstrates.

Since 1926, profits of the Standard & Poor's 500 Stock Index declined in 22 years. In only four of those years, the S&P 500 fell. In the other 18 years, the index was up significantly, averaging 24% a year.

Then there's the myth that recession always spells trouble for the stock market.

Table 2 shows that since 1926, the economy was in recession or depression for all or part of 26 years. In 11 of those years, four of which represent the Great Depression, the market was down. In the other 15 years, the market was up, sometimes dramatically, averaging more than 27% a year.

No one, of course, welcomes economic downturns. But it's wrong to assume they are always bad news for the stock market. The market can prosper — and has prospered — during periods of earnings decline and during recessions. ■

Roger Engemann is president of Roger Engemann & Associates Inc., Pasadena, Calif.

TABLE 1:

Year	Earnings change	S&P 500
1927	−10%	37.5%
1930	−46	−24.9
1931	−37	−43.3
1932	−36	−8.2
1938	−43	31.1
1942	−10	20.3
1943	−10	25.9
1944	−1	19.8
1951	−14	24.0
1952	−2	18.4
1956	−6	6.6
1957	−1	−10.9
1958	−14	43.4
1960	−4	0.5
1961	−2	26.9
1967	−4	24.0
1970	−11	4.0
1975	−11	37.2
1980	−1	32.4
1982	−18	21.4
1985	−12	32.2
1989	−4	31.5

Sources: Standard & Poor's Corp., New York; Ibbotson Associates Inc., Chicago; Bureau of Economic Analysis, Department of Commerce, Washington.

TABLE 2:

Year of recession	S&P 50
1926	11.6%
1927	37.5
1929	−8.4
1930	−24.9
1931	−43.3
1932	−8.2
1933	54.0
1937	−35.0
1938	31.1
1945	36.4
1948	5.5
1949	18.8
1953	−1.0
1954	52.6
1957	−10.9
1958	43.4
1960	0.5
1961	26.9
1969	−8.5
1970	4.0
1973	−14.7
1974	−26.5
1975	37.2
1980	32.4
1981	−4.9
1982	21.4

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AT DEADLINE

NYC assumption hike eyed

New York Mayor David Dinkins wants to raise the return assumption for the $40.7 billion New York City Retirement Systems to 9% from 8.25% to help pay for a 5% raise for municipal workers.

The change must be approved by Comptroller Elizabeth Holtzman, the system's trustees, the governor and the Legislature.

Search on to replace Quirk

Newly sworn-in Massachusetts Gov. William Weld and Treasurer Joe Malone will help select a replacement for the executive director of the $3 billion Massachusetts Pension Reserves Investment Management Board.

Paul Quirk stepped down after a fracas erupted over his ties to a dissident USX Corp. shareholder group and reports of high travel expenses by him and his staff.

Mr. Quirk, who will remain as a consultant through March, is considering several job options. The interim director is Philip Kett, PRIM chief investment officer.

Piedmont, RREEF merge

Piedmont Realty Advisors has been merged with The RREEF Funds, according to Donald A. King Jr., RREEF managing partner. Robert Zerbst, founder of Piedmont, will join RREEF as a principal.

Golz joins Rhumbline

Ronald Golz has joined Rhumbline Advisers Corp., Boston, as managing director.

Mr. Golz, who will represent Rhumbline to corporate pension funds and help develop business strategy, was executive vice president and head of institutional investors services when he took early retirement from State Street Bank & Trust Co. in July 1989.

INSIDE

Illustration by Richard Syska

Waiting for the ricochet

Reforms undertaken by pension fund executives intended to rejuvenate the venture capital industry after a decade of lagging returns are having dire, unforeseen consequences. In Commentary, page 12.

Funds pour $7.8 billion overseas

11-month total exceeds all of 1989

By Margaret Price

Undaunted by grim world events, a bevy of institutional investors committed $7.8 billion to international investments in the first 11 months of 1990.

The 11-month total was 23% higher than the $6.3 billion committed to international managers in all of 1989.

In quest of greater diversification and enhanced returns, funds are embracing a range of styles, with first-time foreign investors often choosing broad international equity mandates, while others are expanding this allocation or zeroing in on regional or country allocations. Foreign bonds — recent stellar performers — also have been gaining popularity.

The international flurry took a variety of forms. During the fourth quarter the $230 million Lukens Inc. pension fund invested overseas for the first time, while the $770 million Dallas Employees' Retirement Fund and the $900 million Goodyear Tire & Rubber Co. pension fund expanded foreign bond and equity holdings, respectively.

Lukens hired Grantham, Mayo, Van Otterloo & Co., Boston, to manage $20 million in foreign equities. Dallas hired Global Fixed Income Advisors, Newark, N.J., for global bonds, while Goodyear hired two regional equity specialists — HD International Inc., London, for European equities, and Globe Finlay Inc., New York, for the Pacific Basin including Japan. Specific allocations for the Dallas and Goodyear hires were not disclosed.

See **Foreign** *on page 23*

The Munich stock exchange will be one of many that benefit through foreign allocations from U.S. pension funds.

Hospitals take no chances

Risk a bad word for $60 billion

By Fred Williams

A few specialized fixed-income firms are prospering managing the ultraconservative hospital industry's $60 billion in investible assets.

While pension funds have gained a reputation, sometimes undeserved, for their aversion to risk and for playing their cards close to the vest, hospital asset managers make most other institutional investors seem almost carefree by comparison.

The conservative orientation represents an enormous opportunity for fixed-income managers, according to Terry Bilkey, principal with Yanni-Bilkey Investment Consulting Co., Pittsburgh, which has carved out a niche in the hospital industry.

Consultants point most often to short- and intermediate-term fixed-income managers such as Payden & Rygel, Los Angeles; Merganser Capital Management Corp., Cambridge, Mass.; Capital Management, Chicago; Lowe, Brockenbrough, Tierney & Tattersall, Richmond, Va.; Alan Seidner Co., Pasadena, Calif.; and Neuberger and Berman, New York, as the major sources of outside management, other than banks, for the hospital industry.

The nation's 6,000 non-governmental hospitals, most of which are non-profit organizations, are heavily oriented toward the fixed-income market for most of their pension and institutional investments. Not just any fixed-income instruments, however. Hospitals are heavily weighted toward the short- and intermediate-term end of the fixed-income spectrum and, except for pension funds, most of the assets are managed internally.

In discussions with dozens of health-care officials, investment specialists and consultants, "conservative" or "ultraconservative" was mentioned by each, without exception, when describing hospital asset management.

Aside from about $100 billion in total pension assets, hospitals have $60 billion to $80 billion in various fund accounts under management. At least 95% of those accounts is tax exempt.

The primary asset pools are funded depreciation accounts, funds set aside to finance capital improvements and major equipment purchases; excess operating assets accounts, including Medicare reimbursements and other government or third-party pay-

See **Hospitals** *on page 22*

Illustration by Guy Porfirio

Can firm settlement expensive

Continental Can Co. Inc.'s $415 million settlement of pension litigation will make companies more careful when scaling back during the recession, some pension experts think.

But the egregiousness of Continental's offenses, the relative rarity of such abuses and recent pension-law changes make it unlikely the company's situation is duplicated elsewhere, the experts said.

Continental agreed to pay $415 million to more than 3,000 former employees who alleged the company had used an elaborate computerized scheme to deprive them of pension benefits by laying them off before they qualified for early retirement benefits.

The payment by Continental, now a subsidiary of Omaha, Neb.-based Kiewit Continental Inc., is believed to be the largest settlement of a case involving the Employee Retirement Income Security Act of 1974.

"It's going to require companies to be very, very careful about how they proceed when they undertake corporate reorganization . . . if the net effect is to give the appearance of blowing away pension rights," said Michael Gordon, a Washington pension attorney.

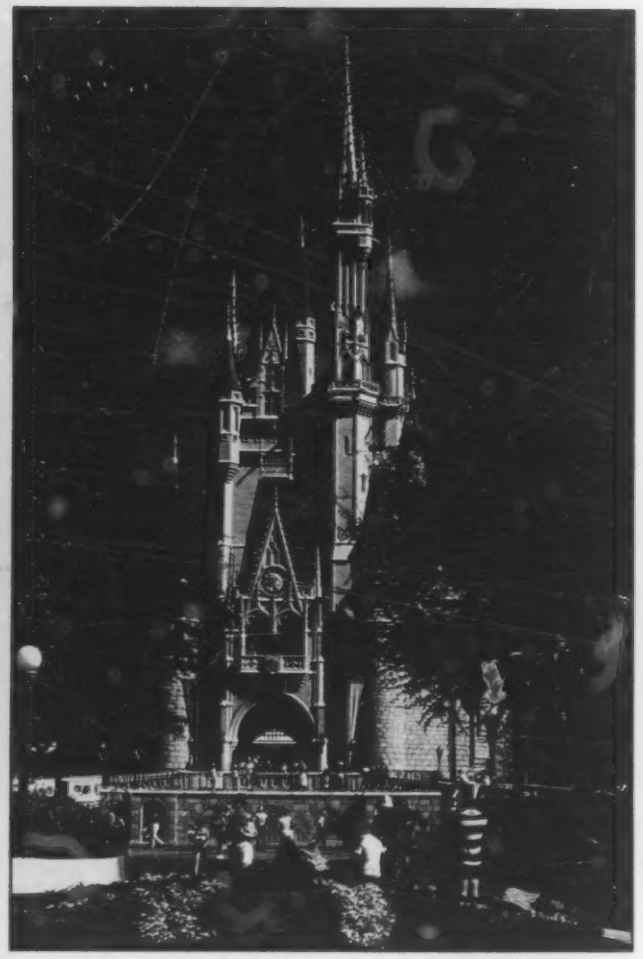
Nevertheless, Mr. Gordon said the settlement should not lead the courts to view every layoff as a possible violation of ERISA.

Continental's situation is considered very unusual by benefits experts.

Under the 1977 contract nego-

See **Layoffs** *on page 23*

NEWS DIGEST



Walt Disney Co. made business news in 1990 with a $2.25 billion convertible deal, the largest ever. The deal was cited as one of the 10 of the best deals of 1990. The series begins on page 15.

The ultraconservative nature of hospital investment practices are making a lot of good news for a few fixed-income managers. Page 1.

FINANCING

Lenders who have discovered the lucrative business of debtor-in-possession financing are the quiet beneficiaries of the current economic downturn. Page 3.

For the third consecutive year, Merrill Lynch & Co. has topped the underwriting rankings both in the United States and throughout the world. Page 4.

INTERNATIONAL

Grim world events are not discouraging U.S. institutional investors from going overseas, as almost $8 billion has been poured into international investments. Page 1.

REAL ESTATE

An executive with Goldman, Sachs & Co. is defending the firm's actions after criticism by participants in a faltering Goldman commingled real estate fund. Page 2.

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Pennsylvania goes private

Investment part of new asset strategy for state fund

By Hillary Durgin

HARRISBURG, Pa. — The Pennsylvania Public School Employes' Retirement System is nibbling at new investment opportunities in the private placement market just as risk-wary financial institutions rein in their investments.

The $16 billion fund is in the midst of negotiating a $15 million investment in a Midwest snowplow company, its first in a slew of private placement deals that could total $500 million.

While the fund's board decided to invest in private placements before the more recent recessionary woes, the timing may be perfect, outside consultants say. Not only can pension funds pick from a variety of deals that usually would have gone to banks or insurance companies, but the dearth of traditional investors means funds can negotiate favorable investment terms.

"The disappearance of the high-yield market and the disappearance of the market for initial public offers means a lot of growth companies need capital," said Douglas K. Le Bon, vice president, principal and head of special investments at Wilshire Associates Inc., Santa Monica, Calif.

And while there is growing pressure for plan sponsors to slide in to provide financing, "because the pension funds know they have less competition, they know they can be tougher on terms," Mr. Le Bon said.

The Pennsylvania decision to invest in private placements was part of an overall strategy to explore new asset classes as the fund diversifies to seek maximum returns, said John C. Lane, chief investment officer for the fund.

Private placements are occupying an increasingly important role in pension fund portfolios, consultants said. Pension funds that have large indexed portfolios can take on the additional level of risk private placements might represent.

Also, funds are realizing that as long-term investors, they do not need to fear illiquidity — once a barrier to their entry.

While some pension funds might be reviewing their asset allocations as a knee-jerk reaction to the current market slump, nontraditional investments, including private placements, will occupy an increasingly important role as part of pension funds' long-term investment strategies, said Paul V. Troup, senior vice president, Callan Associates Inc., Atlanta.

Pennsylvania's blossoming private placement portfolio sits alongside a $50 million investment in farmland, a $72 million mortgage loan to a local developer and a growing exposure in global fixed income.

Investments such as those the

See **Private** *on page 22*

Goldman defends action

Fund liquidation proper, exec says

By Steve Hemmerick

NEW YORK — An executive with Goldman, Sachs & Co. has ripped into some client criticism of his firm's handling of its commingled real estate fund Institutional Property Assets.

Kenneth Brody, a partner with Goldman, Sachs and a trustee of InProp, said ongoing liquidation has been handled in the "highest professional manner," and clients in the fund are "better off" today than they would have been with another manager.

Some clients in the fund have faulted Goldman, Sachs for being unable to complete liquidation of InProp almost four years after it was announced (*Pensions & Investments*, Dec. 24). The fund still has one property, the Philadelphia Stock Exchange building.

In 1986, said Mr. Brody, Goldman, Sachs officials saw it would be in the best interests of its clients to liquidate the open-end commingled fund because of worsening conditions in the real estate market.

At that time, he said, the fund had about $300 million in assets, about $100 million of which was cash.

Instead of investing the remaining cash and getting the clients' 1.25% yearly management fee, Goldman, Sachs returned the $100 million to the nine pension fund clients in the fund.

"Obviously what we did at that time was very unusual because we cost ourselves money. We gave up our fees by returning the cash and not buying properties and (began) selling properties. That is not the normal way a pension fund manager operates," said Mr. Brody.

When clients were informed of the sale of the four properties in InProp, the firm said it wouldn't resort to "fire sale" prices and it might take until 1992 or 1993 to liquidate, said Mr. Brody.

Goldman, Sachs did sell one property in the fund in 1986, the 30 Wall St. building that gave clients a 14% total return, he said. In 1988, it sold the Jefferson Court building in Washington that gave clients a total return of 15%, he said.

Both properties were sold, he said, at "market peaks" rather than holding onto them in a crumbling real estate market.

The properties sold, he said, "are clearly today worth a lot less than they were when we sold them. Our timing was on the money, which is different from most other people.

"What we have done for (clients), my guess is, relative to any other office investment pool they invested in at that time, is performed better because we sold properties off way, way before the decline" in the real estate market, said Mr. Brody.

About the same time, he said, the InProp fund returned to a

See **Goldman** *on page 20*

Health-care unions split fund

By Terry Williams

NEW YORK — The first round of hirings has been completed as the $2.4 billion National Pension Trust Fund for Hospital & Health Care Employees is broken up into five distinct pension funds.

The largest of the new pension funds — representing health and hospital workers in the Northeast — will have about $1.9 billion in assets, while the four others will receive between $50 million and $150 million each. Each will hire its own consultants, investment managers and administrative personnel, said to Eleanor Tilson, executive director of the national fund.

So far, only the New England Health Care Employees Pension Fund, Hartford, Conn., has begun operations. The other four funds have not completed the hiring of administrative and investment personnel, but are expected to be on their own by July 1.

The other funds are: the 1199 Health Care Employees Pension Fund, New York; the Pension Fund for Hospital and Health Care Employees — Philadelphia and Vicinity; the Connecticut Health Care Associates Pension Fund, Hartford; and District 1199J — New Jersey Health Care Employers Pension Fund, Newark.

Until the separation is complete, the funds will operate under the umbrella of the national pension trust, Ms. Tilson said, which then will end operations. Distribution of the assets will be made in cash.

"Since we knew in advance that this was happening, there was enough liquidity to make this happen," Ms. Tilson said.

The funds already have made their first outside hires.

All of the funds — except for New Jersey — hired Chicago-based Marco Consulting Group, which was the consultant for the national fund. The New Jersey fund hired Madison Portfolio Consulting Inc., New York, as its consultant.

In addition, the Philadelphia fund hired WR Lazard & Co., New York, as a fixed-income manager, placing $17 million with the firm.

The New York fund, the largest, will retain the roster of investment advisers used by the national fund.

The breakup is the result of a vote in which the membership elected to affiliate with either the Service Employees International Union or the American Federation of State, County and Municipal Employees, Ms. Tilson said. Once the membership decided to split, union leaders decided to separate the pension assets also. ■

Underwriting rankings have familiar ring

By Marlene Givant Star

For the third consecutive year, Merrill Lynch & Co. topped the underwriting rankings domestically and globally.

In domestic corporate new issues, Merrill widened its lead over second-place Goldman, Sachs & Co. Merrill handled volume of $54.415 billion, representing 17.5% of the 1990 market compared with 14.9% the previous year, according to IDD Information Services, New York. Figures are as of Dec. 27.

Goldman, Sachs' volume rose to $40.329 billion, although its market share slipped a tad to 13% from 13.8% the previous year.

"To rank second and relatively even with last year's (market share) we would consider to be an outstanding result considering that the industry is becoming more concentrated and debt financing is more globalized," said Mark Schwartz, a partner in charge of capital markets at Goldman, Sachs.

"We try to emphasize profitability as well as market share," he said, noting the firm had record profits in the new debt issues and capital markets areas.

Fueled by its lead in oil and gas stock financings, Salomon Brothers Inc. moved up a notch to third place in domestic corporate new issues, switching places with First Boston Corp., which finished fourth. Salomon also moved up a notch in global underwritings to fourth place, displacing Morgan Stanley & Co., which fell to fifth. But Morgan Stanley maintained its fifth place ranking in domestic new issues.

Firm rankings changed little considering the harrowing year for the financial markets. What did change were fees. Although domestic corporate new issue volume narrowly exceeded 1989's record high — logging in at $311 billion — underwriting fees plunged. As if earnings pressure and layoffs weren't enough for Wall Street firms to contend with, fees crashed to $1.9 billion from $3.1 billion in 1989 as the traditionally strongest fee generators, junk bonds and equities, languished.

The turbulent fourth quarter with its stock market dive, Middle East tension and bleak economic forecasts dampened 1990's results. Fourth-quarter losses caused 1990's percentage increase in domestic corporate new issue volume to be the lowest since 1987, when volume actually declined. After a robust three quarters, the fourth quarter of the year realized losses in every category of debt and equity new issues except asset-backed debt financing.

Mortgage-backed securities weathered the storm of bad news. Thanks largely to the strength of the mortgage-backed market, Kidder, Peabody & Co. was the rising star among the top houses, shooting to No. 6 in the overall rankings from No. 10 in 1989. Domestic new issue underwritings by Kidder rose $12.3 billion to $21.1 billion, driven by the firm's first-place showing in mortgage-backed debt.

"The environment was good for the mortgage business and we were fortunate to capitalize on that more than our competitors," said James A. Mullin, managing director of Kidder, Peabody.

He added Kidder's strong commitment to investment banking is "starting to pay off."

While 1990 was an outstanding year for asset-backed and mortgage-backed securities, corporate underwritings by industrials dropped 28.6%. Among corporates, only financial services issues showed a healthy rise of 10.8%.

The junk bond market virtually vanished. Only 10 junk bond offerings totaling $1.3 billion were completed in 1990, a 94.9% drop from 1989 when now-defunct Drexel Burnham Lambert was king of the junk rankings.

The domestic equity sector fell 28% for the year. The stock market's skid and Mideast tensions sent volume down 59.6% during the fourth quarter alone. Initial public offerings were hardest hit, falling 60% to their lowest level since the second quarter of 1985.

The same negative factors coupled with Japan's stock market drop hurt overseas markets. Global new issue volume slumped 8.8% to $504.7 billion for the year, a drop of $48.5 billion from 1989. Equities were hardest hit, declining 40%.

But the globalization of the markets left its mark on Wall Street's competitive landscape in 1990. U.S. corporations are nearly as likely to finance in European currency units or EuroSwiss francs as in dollars, forcing U.S. banks to compete for debt business against big foreign banks like Nomura Securities Co. Ltd., Deutsche Bank and Swiss Bank Corp.

"Industry conditions are as difficult as we've seen them in the last 10 to 12 years," Goldman's Mr. Schwartz said.

While profit-squeezed banks are becoming less willing to commit capital or take underwriting risks on less profitable transactions, Goldman, Sachs plans to capitalize on its relatively strong financial health and aims to build market share in 1991.

"We're quite committed to the capital markets and debt markets in particular," he said, adding Goldman will continue to grow its international business. ■

1990 underwriting rankings
(Full credit to lead manager)

All issues - global*

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	120,149.1	23.8
2. First Boston/CSFB/CS** (2)	107,854.3	21.4
3. Goldman, Sachs (3)	94,457.2	18.7
4. Salomon Brothers (5)	91,857.8	18.2
5. Morgan Stanley (4)	75,027.6	14.9
6. Lehman Brothers (7)	60,888.5	12.1
7. Nomura Securities (6)	57,151.8	11.3
8. Union Bank/Switz. (11)	49,527.5	9.8
9. J.P. Morgan (10)	49,189.5	9.7
10. Deutsche Bank (13)	42,211.3	8.4

* All taxable issues, debt and equity, worldwide, excluding private placements
** First Boston/Credit Suisse First Boston/Credit Suisse
Source: IDD Information Services, New York
Numbers in parentheses show the firm's 1989 ranking

All issues - domestic*

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	54,415.0	17.5
2. Goldman, Sachs (2)	40,328.9	13.0
3. Salomon Brothers (4)	32,376.3	10.4
4. First Boston (3)	32,237.6	10.4
5. Morgan Stanley (5)	31,272.4	10.1
6. Kidder, Peabody (10)	21,059.9	6.8
7. Bear, Stearns (7)	19,252.1	6.2
8. Lehman Brothers (6)	19,064.7	6.1
9. Prudential-Bache (9)	13,285.5	4.3
10. DLJ (11)	6,172.7	2.0

* All taxable issues, debt and equity, sold in U.S. only
Source: IDD Information Services, New York
Numbers in parentheses show the firm's 1989 ranking

All issues - domestic*

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	28,080.2	23.6
2. Morgan Stanley (3)	20,506.7	17.2
3. Goldman, Sachs (2)	19,417.5	16.3
4. Salomon Brothers (4)	13,265.2	11.1
5. First Boston (6)	9,697.1	8.1
6. Lehman Brothers (5)	8,719.8	7.3
7. Kidder, Peabody (8)	2,979.8	2.5
8. Alex. Brown & Sons (11)	2,832.3	2.4
9. PaineWebber (10)	2,175.9	1.8
10. Bear, Stearns (13)	2,038.4	1.7

* All taxable issues, debt and equity, excluding mortgage- and asset-backed debt and agency issues, sold in U.S. only
Source: IDD Information Services, New York
Numbers in parentheses show the firm's 1989 ranking

All debt issues

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	51,711.2	17.9
2. Goldman, Sachs (2)	37,192.5	12.9
3. First Boston (3)	31,433.9	10.9
4. Salomon Brothers (4)	30,340.9	10.5
5. Morgan Stanley (5)	30,164.2	10.4
6. Kidder, Peabody (10)	20,174.6	7.0
7. Bear, Stearns (7)	19,063.1	6.6
8. Lehman Brothers (6)	17,938.2	6.2
9. Prudential-Bache (9)	12,982.3	4.5
10. DLJ (11)	6,072.6	2.1

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 1989 ranking

Convertible debt

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	2,076.6	43.8
2. First Boston (3)	1,341.7	28.3
3. Goldman, Sachs (7)	371.5	7.8
4. Bear, Stearns (15)	200.1	4.2
5. Salomon Brothers (2)	150.0	3.2
6. Morgan Stanley (13)	100.0	2.1
7. Allen (na)	100.0	2.1
8. Smith Barney (11)	95.0	2.0
9. Drexel Burnham (12)	78.5	1.7
10. Montgomery Securities (na)	70.0	1.5

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 1989 ranking

Mortgage- and asset-backed debt

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (5)	21,345.9	12.1
2. First Boston (2)	20,333.7	11.5
3. Goldman, Sachs (1)	19,945.2	11.3
4. Kidder, Peabody (10)	17,777.3	10.1
5. Bear, Stearns (3)	17,019.8	9.7
6. Salomon Brothers (6)	16,519.8	9.4
7. Prudential-Bache (4)	12,538.1	7.1
8. Lehman Brothers (7)	11,070.3	6.3
9. Morgan Stanley (8)	7,401.0	4.2
10. DLJ (11)	5,501.4	3.1

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 1989 ranking

Initial public offerings

Firm	Volume $ mils.	Market share (%)
1. Alex. Brown & Sons (2)	2,555.9	25.3
2. Goldman, Sachs (1)	1,246.5	12.3
3. PaineWebber (6)	1,148.2	11.3
4. Dean Witter (10)	727.5	7.2
5. Merrill Lynch (5)	666.6	6.6
6. Smith Barney (9)	431.5	4.3
7. Salomon Brothers (11)	407.6	4.0
8. Lehman Brothers (4)	391.1	3.9
9. First Boston (8)	382.7	3.8
10. Prudential-Bache (3)	290.7	2.9

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 1989 ranking

Common stock

Firm	Volume $ mils.	Market share (%)
1. Alex. Brown & Sons (3)	2,792.3	14.6
2. Goldman, Sachs (1)	2,601.2	13.6
3. Merrill Lynch (2)	2,064.3	10.8
4. Lehman Brothers (5)	1,777.8	9.3
5. Salomon Brothers (12)	1,655.4	8.6
6. PaineWebber (6)	1,213.6	6.3
7. First Boston (9)	923.6	4.8
8. Morgan Stanley (7)	883.2	4.6
9. Dean Witter (10)	777.1	4.1
10. Smith Barney (11)	754.3	3.9

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 1989 ranking

Preferred stock

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	1,331.0	31.4
2. Smith Barney (6)	600.0	14.2
3. Lehman Brothers (2)	541.0	12.8
4. Goldman, Sachs (5)	510.0	12.0
5. Kidder, Peabody (12)	485.0	11.4
6. Salomon Brothers (4)	340.0	8.0
7. Morgan Stanley (7)	225.0	5.3
8. Dean Witter (na)	125.0	3.0
9. Blunt Ellis & Loewi (na)	45.0	1.1
10. Roney (na)	24.0	0.6

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 1989 ranking

Municipal fund hires consultant

SPRINGFIELD, Mass. — The $100 million City of Springfield Contributory Retirement System has hired The Wyatt Co., Wellesley Hills, as its consultant, said Timothy Murphy, deputy director.

Wyatt will do an asset allocation study and provide a full spectrum of consulting services. By April, Springfield expects to conduct a manager search for an asset class to be determined.

The other finalists were J.A. Hanna Investment Advisory Service, Boston, and Prime Bucholz & Associates, Portsmouth, N.H. ■

PEOPLE

Phillips stresses global approach

■ Evidently, America is still the land of opportunity.

At Frank Russell Co., the new president — the first new one in 32 years — is Michael J. Phillips, a British citizen. The affable, 42-year-old Mr. Phillips had been Russell's senior vice president and consulting director.

"I'm a hybrid. I'm a permanent resident of the U.S., but I clearly can't vote. So it's taxation without representation," he quipped.

But being a non-U.S. citizen may hold some advantages for Mr. Phillips, who takes over for George Russell Jr. — who remains Russell's chairman and chief executive officer. "Our future lies in being global," said Mr. Phillips. As long ago as the early 1970s, George Russell correctly foresaw that pension funds "would become much more international."Frank Russell Co., Tacoma, Wash., also has become more international. It has operations in London, Toronto, Sydney and Tokyo. Its international business, mainly in the consulting area, "has been growing about 25% a year over the past five years or so," said Mr. Phillips. However, Frank Russell's aim is to become "a fully global company in all three of its areas" — consulting, investment management and data collection.

Michael Phillips succeeds George Russell Jr. as Frank Russell's new president.

Retail property returns, pulled down by falling values, no longer provide solace to investors.

REAL ESTATE

Retail, warehouses also fall victim to property woes

■ Warehouse and retail properties, previously exempt from problems hurting most other forms of real estate, are now suffering from the economic downturn in the United States, according to the Russell-NCREIF Property Index.

The total return for warehouse properties declined to 0.9% in the third quarter of 1990, compared with 3.5% in the third quarter of 1989. The total return for retail properties declined to 1.1% in the third quarter, compared with 2.4% during the same period of the previous year.

Office properties, which have suffered generally from high vacancy rates nationwide during the past several years, showed further declining performance. According to the index, office properties had a total return of 0.1% during the third quarter, compared with 0.9% in the third quarter of 1989.

The NCREIF Real Estate Performance Report stated the decline in returns came from falling appraised values rather than income returns. Income from the property types held relatively steady.

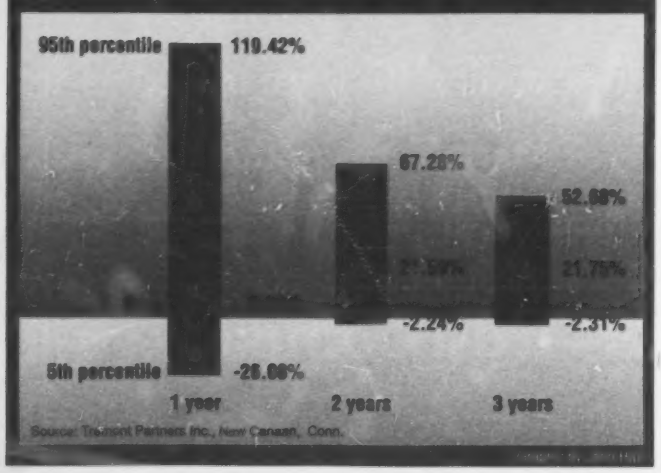
The index measures the performance of 1,389 institutional properties valued at $20.5 billion. No leveraged properties are included.

Overall, properties in the index had a total return of 0.6% for the third quarter of 1990, down more than half from the 1.7% total return for the third quarter of 1989.

Tremont universe of limited partnerships

(Periods ended Sept. 30)

Limited partnerships that focused on short selling provided the most outstanding results during the third quarter of 1990. Specialty managers that focused on technology stocks continued to struggle. Returns for periods greater than one year are annualized. Investment returns are gross (before) management expenses and performance fees.



Source: Tremont Partners Inc., New Canaan, Conn.

WASHINGTON

Employers given 1-year extension

■ Employers have won an additional year to comply with a complicated Internal Revenue Service proposed regulation affecting virtually every pension plan in the country.

The weighty rules that guide employer testing for discriminatory practices under 401(a)(4) of the Internal Revenue Code will go into effect in 1992, although employers must make a good faith interpretation of the rules until then.

The extra year will give employers more time to test their retirement plans for compliance and make any necessary design changes in order to conform with the rules, which are not yet finalized.

The delay will save companies some adminstrative burdens and expense, said John Woyke, principal with TPF&C, Valhalla, N.Y.

PERFORMANCE

Allocators make hay in 3rd quarter

■ The median asset allocator beat the market by 616 basis points in the third quarter, according to figures compiled by Performance Analytics Inc., Chicago.

The median return for the universe was −7.7%. First quartile performance was −4.9%, while the third quartile cutoff was −10.27%, still topping the S&P 500's −13.86%.

The top performer was J.H. Ayres & Co. Inc., Colorado Springs, Colo., which returned 3.14% for the third quarter and 18.6% for the year through Sept. 30. The firm has been invested 100% in cash since June.

Buffalo Capital Corp., Newport Beach, Calif., returned 2% for the quarter and 5.5% for the year to date. The firm's clients were 100% in cash for most of the first three quarters, but went to 100% equity to start the fourth quarter.

Krehbiel & Hubbard, Kirkland, Wash., the only other firm listed in the universe that was at 100% cash at the end of the third quarter, returned 0.8% for the quarter and 4.3% for the first three quarters of the year.

On the opposite side of the spectrum, Webster Management Corp., New York, reported being 81% in stocks at the end of the third quarter; it returned −10.27% for the quarter and −6.6% for the three-quarter period.

The firm changed its name to Kidder, Peabody Asset Management and replaced James Taliaferro, its chief investment officer.

BENEFITS

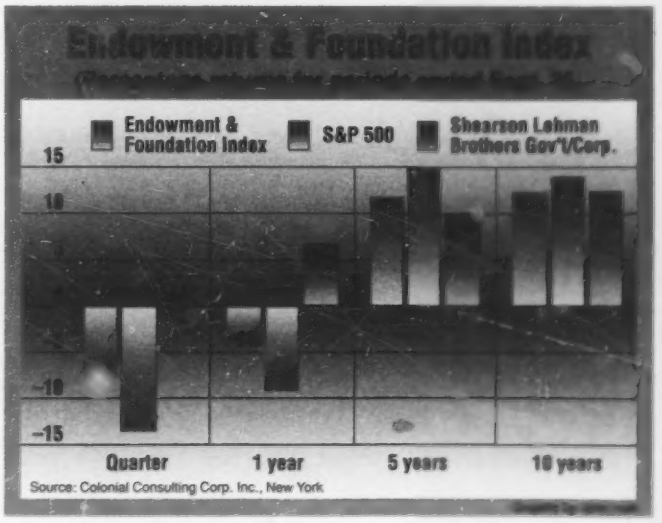
Pension payments vary by country

■ Retirement benefits worldwide range from less than half to upwards of 80% of workers' final income, according to a study by Towers Perrin, New York.

A typical middle-management employee in Italy will receive retirement benefits amounting to 84% of final income; the benefits consist primarily of social security payments and a "termination indemnity," which is a government-mandated lump-sum payment upon retirement. A Hong Kong employee, however, will have only about 48% of final income replaced at retirement, entirely through company plans.

"Multinational companies face an astounding number of retirement income variables around the globe," said Wolfgang Glage, Towers Perrin vice president.

In most countries, highly paid workers have a smaller percentage of their income replaced by retirement benefits than do lower-paid ones. U.S. private pension plans and Social Security replace 84% of the typical factory worker's income, compared with 68% of a middle manager's and 53% of an executive's. In Japan, 67% of the factory worker's pay is replaced, 50% of the middle manager's and 40% of the executive's.



INTERNATIONAL

U.S. government seeks volunteers

■ Will foreign companies voluntarily inform the U.S. government if they are making sizable investments here?

That's what the Treasury Department is hoping.

The Committee on Foreign Investment in the United States, chaired by the Secretary of the Treasury, will continue to review voluntary notice of mergers, acquisitions and takeovers of U.S. businesses by foreigners even though the section of the Defense Production Act requiring notice has lapsed. That provision authorized the president to review, on national security grounds, proposed transactions involving foreigners that could result in control of U.S. firms.

The Treasury Department is urging foreigners to continue to file voluntary notices with the CFIUS until Congress decides whether to renew the provision.

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January 21, 1991

Pensions&Investments

The Newspaper of Corporate and Institutional Investing

$9 An Issue $135 A Year

1000 Largest Funds

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January 21, 1991

Pensions&Investments

The Newspaper of Corporate and Institutional Investing — $9 An Issue $135 A Year

AT DEADLINE

War spurs investor shifts

The threat and then outbreak of fighting in the Persian Gulf prompted a flurry of investment activity by participants in defined contribution plans.

Fidelity Investments reported heavy participant queries in the days leading to the outbreak of war. On Jan. 16, investors were transferring from equities into money markets, but as markets opened Jan. 17, Fidelity reported above-average investment activity, with the majority of transfers going into equities.

2 funds buy city's issue

Trustees of the Philadelphia Municipal Pension Fund and of the Pennsylvania Public School Employes' Retirement System voted to buy a portion of the city's $150 million revenue anticipation note issue, crucial to its continued operation.

Each system committed to buy $37.5 million of the issue; local banks purchased the balance. The notes bear interest at the prime rate, now 9.5%. The city also will pay investors a fee equal to 2% of their commitments.

Trust changes managers

The AFL-CIO Staff Pension Fund, with about $100 million, has awarded a $30 million fixed-income account to ASB Capital Management. Funds came from Lehman Ark Management.

Bank to boost capabilities

Amalgamated Trust and Savings Bank hired Goldman, Sachs Asset Management as adviser to its expanding investment management services.

The bank, with $2 billion in trust assets, expects to offer added capabilities in quantitative, active fixed-income and equity management, said Robert J. Shank, executive vice president.

INSIDE

Photo courtesy of Richard Bierstuhl

Talk, don't take a poll

Surveying directors for their views on corporate governance is a bad idea. Instead, institutional shareholders, management and directors need to come together in a dialogue to improve the process. Commentary, Page 14.

Growth stalled for Top 1,000 funds

Assets creep up to $1.876 trillion

By Trudy Ring

Plummeting U.S. and foreign stock markets constrained pension asset growth in the year ended Sept. 30, with the Top 1,000 sponsors' assets rising just more than 0.2% to $1.876 trillion from $1.871 trillion.

Defined contribution plans, with a slightly lower allocation to equities, fared somewhat better than defined benefit plans. Also, for the third consecutive year, defined benefit plan payments to retirees exceeded employer contributions.

These findings from *Pensions & Investments'* survey of the Top 1,000 pension funds indicate sponsors may step up contribution rates, consultants said, while adding a recovery in equity returns is likely.

The results of the latest survey are in sharp contrast to the one taken a year ago. In the year ended Sept. 30, 1989, assets of the Top 1,000 sponsors grew 18%, fueled by strong market returns.

In the current survey, defined benefit assets of the Top 1,000 sponsors dropped 1% to $1.466 trillion from $1.481 trillion. A benchmark portfolio reflecting the Top 1,000 average aggregate asset mix would have dropped 0.5%.

Defined contribution assets of the Top 1,000 sponsors rose 4.7%, to $391.4 billion from $374 billion. A benchmark portfolio for those assets would have risen 1.3%.

The total of defined benefit and defined contribution assets is slightly less than the overall total because some sponsors did not provide a breakout. Also, the Top 1,000 total is different from that featured on charts elsewhere in this issue because the number was updated after the charts were printed.

Among the Top 1,000, defined benefit plans had an average 43.6% in stocks, while defined contribution plans had a 39.8% equity allocation (including company and other stock). The Standard & Poor's 500 Stock Index lost 9.4% of its value in the year ended Sept. 30; the Wilshire 5000 lost 13.1%. The Morgan Stanley Capital International Europe Australia Far East Index dropped 27.4% for the 12 months.

Assets of the Top 200 sponsors

See **Top 200** *on page 77*

War puts new burden on investors

Institutions assess political risks

By Marcia Parker and Margaret Price

The Middle East fighting has made politics a weightier consideration for investments.

Watching international markets gyrate, U.S. investors are focusing more on the impact of political risk on their portfolios and the implications for many of the international companies in which they invest.

On a shorter-term perspective, developments in the Persian Gulf — especially early Allied successes — triggered market reactions. In the first day of trading since fighting began last week, some key markets, including Japan's, surged.

But certainly, not all money managers were rushing to react. Henderson International, London, was a seller in the U.S. market and not a buyer in other markets,

See **Mideast** *on page 77*

The Mideast fighting has put the problem of risk in a whole new light for U.S. international investors.

Xerox cash-balance plan a coup in timing

By Margaret Price

STAMFORD, Conn. — A switch to a cash-balance plan from primarily a profit-sharing plan one year ago proved timely for Xerox Corp., allowing employees to avoid the tumult of the stock market.

Although equity prices dropped — the Standard & Poor's 500 Stock Index was down 3.2% for the year — Xerox employees' retirement accounts grew for the year by a guaranteed amount, and received a guaranteed investment return.

Under the profit-sharing arrangement, employees' retirement accounts rose or fell with the markets and company profits.

As a result of the switch, Xerox's employees found their retirement accounts shielded on the downside, according to Patricia M. Nazemetz, Xerox's director-benefits.

But market timing was not the point when Xerox became one of the largest companies to adopt a cash-balance plan, in which employees receive retirement accounts that expand by defined amounts annually.

Instead, the Stamford, Conn.-based company, with $3.3 billion in employee benefit assets, was reacting to new rules for integrating pension and Social Security benefits that were included in the 1986 Tax Reform Act, with proposed specific rules issued by the Internal Revenue Service in May 1990. (Those rules, however, do not take effect until 1992.)

Xerox "felt we wouldn't pass (the new) integration requirements," said Ms. Nazemetz.

The new law said companies could continue to reduce their pension benefit through integration, but the result could not be to reduce the "gross" company pension benefit by more than half of what an employee would have received without such integration.

Rather than continuously change its pension integration with the whims of Washington, Xerox took the opportunity to review its entire pension structure — one that, according to Ms. Nazemetz, had been born during "a different business environment" at the company.

Unlike most large companies that have defined benefit plans, Xerox relied on the profit-sharing plan as its primary retirement vehicle.

See **Xerox** *on page 76*

NEWS DIGEST

The NWNL Cos. Inc., whose Minneapolis headquarters is pictured here, seized an opportunity to help shore up the regulatory capital of its core insurance subsidiary. Page 6.

A move to a cash-balance plan proved timely for Xerox Corp., allowing employees to avoid the tumult of the 1990 stock market. Page 1.

A new retirement savings plan for small business is expected to be introduced in the Senate. Page 3.

The California Public Employees' Retirement System withdrew 1991 shareholder proposals at three firms after reaching compromises with management. Page 4.

SPECIAL REPORT: THE TOP 1,000 FUNDS

Plummeting U.S. and foreign stock markets hold back pension asset growth, with the Top 1,000 sponsors' assets rising just more than 0.2% to $1.376 trillion. Page 1.

Interest in alternative investments seemed flat in 1990, marked by only small growth among the nation's top funds. Page 17.

No surprises were found in the choice of investment managers by the top pension funds, with only minor position changes affecting the latest ranking. Page 18.

INTERNATIONAL

The fighting in Iraq and Kuwait is putting politics and risk at the forefront for U.S. pension funds and investment managers with foreign holdings. Page 1.

REAL ESTATE

The Ameritech pension fund is suing its former director of real estate investments, alleging he breached his fiduciary duty. Page 3.

DEPARTMENTS

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Manager questionnaires prepared

Questionnaires for *Pensions & Investments'* annual survey of the largest institutional investment management firms are being prepared. The forms will be mailed the first week in February and are due Feb. 25. The special issue will be published May 20. If you are not on the mailing list and wish to receive a form, contact Christine Philip, directory coordinator, (312) 649-5217.

Pan Am plans for survival

Pension liability negotiations key to airline's future

By Joel Chernoff

WASHINGTON — Pan Am Corp. hopes to shed its unfunded pension liabilities as one of the keys to its survival.

The question is: How good of a deal can the company swing with the Pension Benefit Guaranty Corp., the agency that would have to assume the pension debt?

Paying for its unfunded pension liabilities — estimated between $490 million and $800 million — long has been a drag on the bankrupt carrier's cash flow. The company has time and again deferred pension payments and now is in default on its most recent $53 million funding waiver.

In addition, the liabilities have served as an albatross around Pan Am's neck in past efforts to sell or merge the company. For example, both AMR Corp. and NWA Corp. have scrutinized Pan Am's books and were put off by the company's pension debt, Pan Am officials acknowledged.

Pan Am's Jan. 8 filing for protection from creditors under Chapter 11 of the Federal Bankruptcy Code clearly placed the lion's share of the blame on "external events beyond our control," including terrorist acts, soaring jet fuel prices stemming from the Persian Gulf crisis and a deteriorating economy.

But the airline holding company, whose three subsidiaries are Pan American World Airways, Pan Am Express and the Pan Am Shuttle, also said it hopes to restructure its debt obligations — including negotiating a settlement of its unfunded pension liabilities.

Any settlement of those obligations, however, likely would involve the termination of Pan American World Airways' three underfunded pension plans. Pan Am had $622 million in pension assets as of Sept. 30.

The company lists its contingent liability to the PBGC at $490 million, but the agency says Pan Am would owe $800 million if the plans were terminated, based on a 7.25% interest rate. Of the $800 million figure, three-quarters involve unfunded benefits guaranteed by the PBGC, while the remaining $200 million covers non-guaranteed benefits.

The PBGC also holds a security interest on 100% of the stock of the Pan Am Shuttle. The stock was offered as collateral on the $53 million funding waiver granted in September; Pan Am went into default on its agreement when it failed to pay back $30

See **Pan Am** *on page 76*

White goes to Rockefeller

Unisys executive joins foundation

NEW YORK — David White, the former director-capital management and trust investments at Unisys Corp., is the new treasurer of the more than $2 billion Rockefeller Foundation in New York.

Mr. White is replacing Jack Meyer, who left the post in June to become president of Harvard Management Co., Harvard University's investment arm (*Pensions & Investments*, June 11).

Mr. White, considered by colleagues in the industry to be an innovator, joined Unisys in 1986 after it was created from the merger of Burroughs Corp. and Sperry Corp. Mr. White had been Burroughs' director-trust investments since 1983. He was then appointed head of the combined funds.

At Unisys, he oversaw about $5.4 billion of employee benefit assets, including $2.8 billion in a defined benefit plan plan, $1.7 billion in a 401(k) plan and $600 million covering the company's foreign employees.

He is joining a foundation that has been an innovative institutional investor.

Rockefeller has employed short-selling programs, enhanced international index funds, private placements, tactical asset allocation, index arbitrage, forward conversions, international warrants and risk arbitrage. The fund also was an early investor in distressed securities, leveraged buyouts and emerging international markets.

Mr. White was replaced by Charles A. Service, who worked closely with Mr. White as Unisys' director of investment programs. Mr. Service doesn't expect to make any significant changes in the pension fund.

David White is the new treasurer at the $2 billion

He joined Unisys in 1983, coming from Burroughs with Mr. White. Mr. Service worked previously for Ford Motor Co. and Standard & Poor's Corp. ■

2 more execs leave Wilshire

By Steve Hemmerick

SANTA MONICA, Calif. — The exodus hasn't stopped at Wilshire Associates.

Two more senior executives have resigned amid claims Wilshire is facing a difficult management situation and lacks "aggressiveness" in its international consulting division.

The most recent executive to resign is Robert L. Garvy, a board director, senior vice president and head of the asset management services division. He resigned effective Dec. 31 and now is president and chief executive officer of Investment Index Technologies, a money management subsidiary of Prudential Insurance Co. of America.

Earlier, Lawrence E. Davanzo announced his resignation, effective Jan. 31. Mr. Davanzo is a board director, senior vice president, and head of international consulting at Wilshire. He plans to seek partners to open his own consulting firm that has a mix of domestic and international clients.

The resignations of Messrs. Garvy and Davanzo follow those of Dale Stevens and Douglas LeBon, both former vice presidents and board directors who resigned last year.

Robert L. Garvy said Wilshire faces a "difficult situation" in regard to top management.

Noting four board members left Wilshire in the last few months, Mr. Garvy said Wilshire faces a "difficult situation" with regard to its top management.

Despite the exodus of personnel, Mr. Garvy noted Dennis Tito, Wilshire president, is a survivor and has faced difficult situations before.

All of the recently departing executives except Mr. LeBon had 12 or more years at Wilshire and were instrumental in its growth.

Mr. Tito rejects the idea Wilshire is facing a difficult management situation. While both Mr. Garvy and Mr. Davanzo have made valuable contributions to Wilshire, neither served in a critical role, he said, adding no one at Wilshire reported to Mr. Davanzo or Mr. Garvy.

Had either man left 10 years ago, it would have been a major

See **Wilshire** *on page 75*

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Romance continues with foreign markets

By Margaret Price

The Top 200 U.S. pension funds shelved market and economic worries and continued to increase foreign investments in the year ended Sept. 30, according to *Pensions & Investments* data.

The quest for diversification and — hopefully — higher returns spurred total international investments 16% to $45.7 billion by defined benefit plans and 2.7% to $5.47 billion by defined contribution plans during the period.

Indicative of the pace of international investing is the fact the $54 billion California Public Employee Retirement System was pouring "several hundred million dollars a month" into international equities, and in a little over a year has become the largest international investor among U.S. pension funds.

The increases were particularly impressive in light of faltering equities markets. For the year ended Sept. 30, the Morgan Stanley Capital International Europe Australia Far East Index plunged 27.4%. Accordingly, quite a few funds' overseas assets slid. But few if any funds reacted by vacating international markets. "Not to say some haven't, but we have not seen (funds) pulling money out" of the international arena, said Arthur McCain Jr., vice president-sponsor services, Inter Research Corp., Stamford, Conn.

On the contrary, pension funds have demonstrated increasing comfort and familiarity with foreign investing, as illustrated by the increased expansions into regional and emerging markets and other targeted outlays.

For the year ended Sept. 30, international equities and bond holdings both gained in popularity. Among defined benefit plans, foreign equities posted an actual 6.1% rise to $34.7 billion. Adjusted for the impact of the declining world markets, the gain was 46%. While actual foreign equities holdings by defined contribution plans fell 2.5% to $5.022 billion, adjusted for the world market declines the figure represented a substantial 34% gain.

International bond investing also gained steam, although from a much lower base. The Top 200 defined benefit plans had slightly more than $10 billion invested as of Sept. 30, a 67% rise from the previous year's $6.048 billion, and 55% when adjusted for the returns from international markets. Defined contribution assets in inter-

See **Foreign** *on page 70*

Funds sticking to beaten path

By Fred Williams

Interest in alternative investments such as oil and gas, venture capital, private placements and leveraged buy-outs among large pension plans seemed flat in 1990, according to the *Pensions & Investments* survey of the Top 200 pension funds.

While the total in each of these categories — except oil and gas — by the 10 defined benefit funds with the largest investments increased slightly in each case, the growth was not significant and represents only a small portion of total assets.

Investors and financial analysts believe large pension funds will continue to support some investments in venture capital and to some extent oil and gas, but they do not see leveraged buy-outs gaining much interest in the aftermath of 1990s economic slowdown and problems in the junk bond market.

Overall in alternative investments, the number of funds among the Top 200 investing in each and the total assets vs. the previous year were: venture capital, 69 funds with $5.02 billion, up 14% from 68 funds and $4.395 billion; private placements, 50 funds with $10.54 billion, up 0.2% vs. 45 funds with $10.52 billion; leveraged buy-outs, 27 funds at $6.49 billion, up 26% from 27 funds at $5.16 billion; and oil and gas, 21 funds with $945 million, up 12% from 19 funds at $844 million.

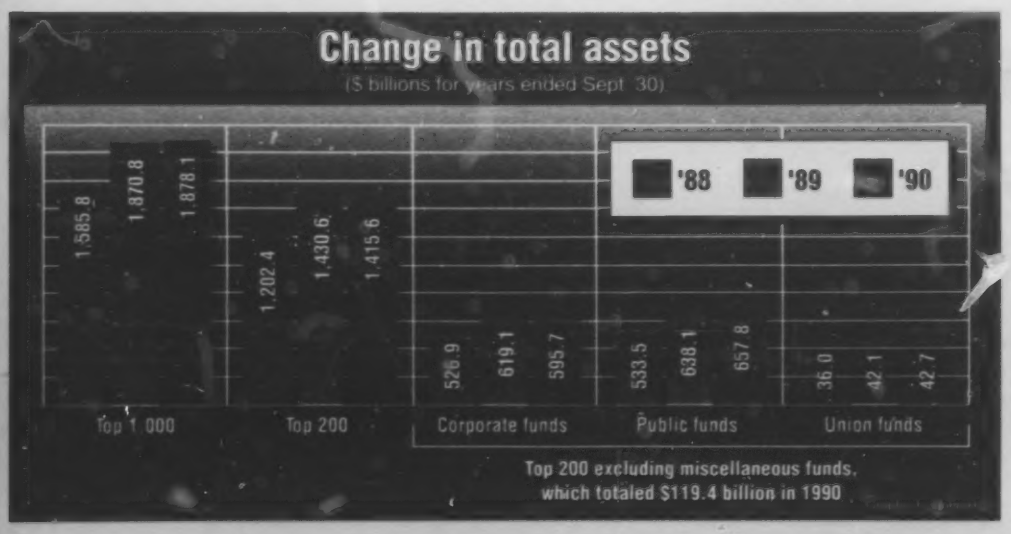
The total investment in venture capital by the 10 largest investors as of Sept. 30 was $2.5 billion compared with the 10 largest venture capital investors total of $2.4 billion a year earlier. Private placement investments dropped slightly totaling $8.7 billion vs. $9 billion for the previous year.

In the LBO area, the 10 largest investors held a total of $5.6 billion in the most recent survey compared with $4.5 billion a year earlier.

"I think the attraction of LBOs and venture capital in the past has been to enhance returns rather than diversify or make the portfolio more conservative," said Noel Feldman, investment analyst with Hewitt Associates, Santa Ana, Calif. "Today, most plan sponsors want to take the risk out of their portfolios rather than put it in.

"The difficulty with alternatives is timing. Plan sponsors are correct in taking risk out, but with most alternatives they require too much lead time to be effective. You must take the leap 12 to 18 months ahead of time or you won't get any benefit. It's a little difficult to time these investments with that much lead time in-

See **Alternatives** *on page 70*



Number of Top 200 funds using various strategies

	Defined benefit	Defined contribution
Equity index funds	112	46
Bond index funds	56	9
GICs/BICs	36	65
Dedicated/immunized bonds	33	3
Foreign equities	101	14
Foreign fixed income	44	5
Foreign other	7	1
Real estate equity	123	11
Mortgages	53	3
Mortgage-backed securities	69	12
Non-investment-grade bonds	21	na
Venture capital	68	1
Oil & gas	22	1
LBOs	26	1
Private placements	32	2

Profile statistics at a glance

($ billions)

	1989	1990
Top 1,000 assets*	1,878.1	1,870.8
Defined benefit	1,467.2	1,480.8
Defined contribution	392.0	374.0
Top 200 assets*	1,415.6	1,430.6
Top 100 assets	1,182.5	1,198.2
Top 50 assets	924.8	940.0
Top 25 assets	678.6	690.1
Top 200 defined benefit	1,124.4	1,159.8
Top 200 defined contribution	272.6	265.3
Top 200 profit sharing	11.1	14.5
Top 200 401(k)/thrift	50.2	85.2
Top 200 defined benefit		
Internal management*	490.3	490.8
Equities	157.3	173.5
Fixed income	232.8	224.4
Short-term	36.9	39.8
Real estate equity	20.8	17.1
Other	24.9	22.9
Equity index funds	137.4	155.2
Internally managed	84.5	99.2
Bond index funds	66.3	65.4
Internally managed	25.5	16.4
Real estate equity	50.1	43.7
Mortgages	23.9	16.7
Mortgage-backed securities	60.4	60.7
GICs/BICs	4.9	3.0
International	45.7	39.4
Equity	34.7	32.7
Fixed income	10.1	6.1
Other	0.9	0.6
Venture capital	5.0	4.4
Dedicated/immunized bonds	26.6	34.1
Oil & gas	0.9	0.8
LBOs	5.7	4.5
Private placements	10.5	10.5
Non-investment-grade bonds	2.7	na
Contributions paid	31.1	30.7
Benefits paid	44.0	41.1
Top 200 defined contribution		
Internal management*	128.5	119.5
Equities	42.0	43.6
Fixed income	56.3	51.1
Short-term	15.8	13.6
Real estate equity	4.6	3.1
Other	6.8	7.4
Equity index funds	27.5	32.5
Internally managed	22.2	27.0
Bond index funds	0.7	0.3
Internally managed	0.0	0.0
Real estate equity	5.0	3.7
Mortgages	19.5	18.1
Mortgage-backed securities	5.4	2.4
GICs/BICs	34.7	36.0
International	5.4	5.3
Equity	5.0	5.1
Fixed income	0.4	0.2
Other	**	0.0
Venture capital	**	**
Dedicated/immunized bonds	0.2	**
Oil & gas	**	**
LBOs	0.8	0.7
Private placements	11.2	10.0
Contributions paid	9.1	9.2

*Total is greater because some funds did not provide a breakout.
**Less than $100 million.

How sponsor data were compiled

The information on employee benefit funds contained in this special report was compiled in several steps.

Questionnaires were sent to almost 1,500 fund sponsors in *Pensions & Investments*' data base. The largest 1,000 were identified from the completed questionnaires, follow-up telephone calls and a cross-check with information supplied by Money Market Directories Inc., Charlottesville, Va., publisher of the **1991 Money Market Directory of Pension Funds and Their Investment Managers**.

tion contained in the profiles of the Top 200 employee benefit funds was obtained from the completed questionnaires and from interviews with fund officials by the *P&I* editorial staff.

Where no information was available from the fund, figures were taken from the MMD.

Unless otherwise noted, the data reflect fund operations as of Sept. 30, 1990.

In cases where the fund supplied data considered too old, *P&I* estimated the asset growth based on one of the following methods: the most recent asset mix supplied by the fund; the asset mix reported in the 1991 Money Market Directory; or *P&I's* reported average asset mix for that particular type of fund, i.e. union, corporate or public. In some cases, the estimates were based on asset totals reported in the sponsor's most recent annual report.

In the tables accompanying the profiles, dollar amounts are rounded to the nearest million.

The asset mixes for the Top 200 and Bottom 800 funds represent the average of all reported allocations for the respective funds; the aggregate defined contribution asset mixes are based on the sponsor's largest plan only. The separate asset mixes for the components of the Top 200 and Bottom 800 universes were compiled in the same manner. ■

PBGC taking new fixed-income route

By Joel Chernoff

WASHINGTON — Before the quarter is out, the Pension Benefit Guaranty Corp. expects to hire fixed-income managers to run $2 billion in assets as part of a major overhaul of its investment strategy. New active equity hires are expected to be announced a couple of months thereafter.

The agency's $2.7 billion in assets represent prestige accounts for money managers. But it is the PBGC's novel fixed-income strategy that presents the greatest challenge.

"It's a cerebral piece of business," said Jess Yawitz, principal in St. Louis with National Investment Services of America Inc.

To protect itself from volatility of returns and a potential onslaught of claims from terminating pension plans, the PBGC is trying to match its assets with its liabilities and more closely resemble an insurance company investment structure.

The agency's new strategy, announced last fall, is to create a dollar-duration bond portfolio. A dollar-duration portfolio multiplies the duration of the liabilities — the measure in years of the change in the liabilities' value relative to a change in interest rates — by the amount of the liabilities.

Because the agency's liabilities exceed its deficit, the desired duration of the portfolio will have to exceed that of the agency's liabilities. In the PBGC's case, that will drive the duration of the portfolio to more than 15 years, compared with 8.5 years for the liabilities.

"We're sort of in the strange position of immunizing a deficit, which is not normal, which kind of puts us out in the thin air of long duration," Charles Evans, the PBGC's senior investment adviser, told interested bidders on the fixed-income contract last fall.

The agency's deficit officially is listed at $1 billion, but it promises to be much larger once agency officials close the books for the fiscal year ended Sept. 30. The deficit is expected to climb substantially because of a combination of investment losses and termination claims, including those for seven Eastern Air Lines Inc. plans.

Meanwhile, target allocations for bonds will be boosted to about 75% of total assets, from 55%,

See **PBGC** *on page 71*

Funds stay with first string

Minor jockeying only big change in manager line-up

By Fred Williams

J.P. Morgan Investment Management Inc., New York, maintained its position atop the list of money managers most used by the nation's largest defined benefit pension plans, according to the latest *Pensions & Investments* survey of the Top 200 pension plans.

The five money managers mentioned most often by large plan sponsors is essentially the same as the previous year, with the exception of Trust Co. of The West, which climbed to third overall from fifth.

J.P. Morgan received 68 mentions, while Wells Fargo Nikko Investment Advisors, San Francisco, finished second with 55 mentions.

As in the past two years, the top money managers are characterized by their sheer size. All are multiline companies offering a variety of investment approaches and products.

"I'm not surprised," said Phil Schneider, chairman of Wyatt Asset Services Inc., Chicago, about the managers receiving the most overall mentions by plan sponsors.

"The common thread is that these are firms with a broad mix of products and are well-established asset management firms," he said.

The only major shift among the top five most often mentioned managers in 1990 was the move by TCW to the third place from fifth. While TCW finished third overall, the Los Angeles investment management firm only made the top five in one asset-specific category, domestic real estate, where it ranked fifth with 21 mentions.

Tom Larkin, TCW president, said the results aren't surprising because "basically we offer 25 investment disciplines" ranging from traditional active equity and fixed income to oil and gas, bankrupt bonds, global, convertible securities and private placements.

"For us last year, bankrupt bonds (bonds of companies that have filed for Chapter 11 protection) or bonds of troubled companies were a big area, as well as high-yield bonds and the global area," said Mr. Larkin. "We are very spread out in terms of product mix."

He said TCW is "very bullish" for 1991 and looks for continued growth in such areas as international oil and gas investments, privatizations, cogeneration and investments involving Latin America.

"We think there will be continued significant interest in all these areas," he said.

P&I asked the Top 200 funds to list the managers they use to handle their retirement assets. If sponsors used a manager for more than one asset class, each mention counted in the managers' overall total. The managers' ranking in the asset classes, however, reflects the number of pension funds using them only in that class.

In addition to ranking tops in the overall classification, J.P. Morgan finished second in domestic fixed income with 24 mentions and fourth in the international manager class with 14 mentions.

Wells Fargo Nikko, which ranked second overall, also ranked in the top five in two other charts. For the third straight year it came in first among domestic equity managers, with 24 mentions, and fifth in domestic fixed income, with 11 mentions.

New to the top five domestic equity managers list is Rosenberg Institutional Equity Management, Orinda, Calif., which finished fifth with 15 mentions.

Marlis Fritz, partner at Rosenberg, said the firm, which has been in business since 1985, follows a "very disciplined investment process" involving fundamental analysis of relative values.

"We are a quantitative equity manager with an ambitious investment objective — to outperform a client-designated benchmark by at least four percentage points, and I think we have been successful," she said.

Ms. Fritz said plan sponsors find the approach attractive because "they are looking for a con-

See **Managers** *on page 71*

Top consultants

	Times mentioned
Frank Russell	20
Callan	18
SEI	14
Wilshire	12
Rogers, Casey	6
EAI	6

Top master trustee/custodians

	Times mentioned
Bankers Trust	32
Northern Trust	22
Boston Safe	19
State Street	19
Mellon Bank	12

Top global custodians

	Times mentioned
Chase Manhattan	17
Bankers Trust	15
Northern Trust	13
State Street	13
Boston Safe	11

Top managers overall

	Times mentioned
J.P. Morgan	68
Wells Fargo Nikko	55
TCW*	52
Prudential*	46
Equitable*	45

Top domestic equity managers

	Times mentioned
Wells Fargo Nikko	24
Alliance	22
Mellon*	22
Capital Guardian	19
Rosenberg Institutional	15

Top domestic bond managers

	Times mentioned
PIMCO	25
J.P. Morgan	24
Loomis, Sayles	12
Mellon*	12
Lincoln	11
Wells Fargo Nikko	11

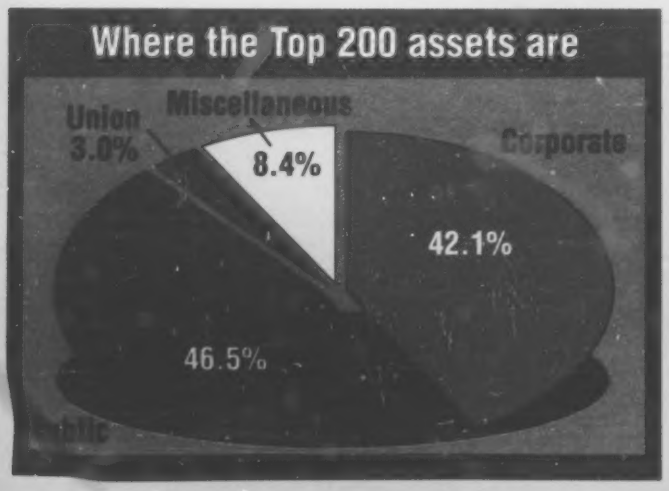
Top international managers
(incl. equities, bonds, cash & other)

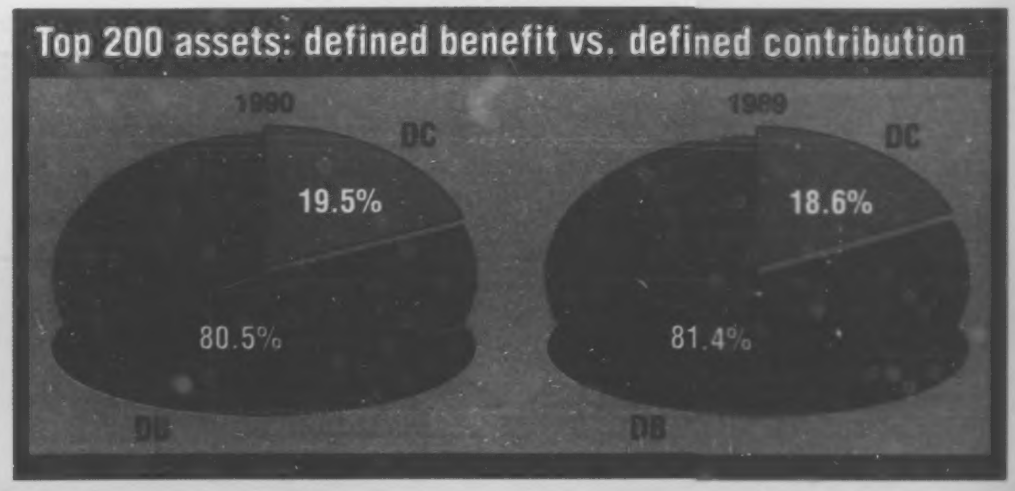
	Times mentioned
Capital Guardian	17
State Street	15
Baring International	15
J.P. Morgan	14
Nomura	13

Top domestic real estate managers

	Times mentioned
Equitable*	31
JMB	29
Prudential*	28
Aetna	24
TCW*	21

*Includes all named subsidiaries





Top 200 pension funds/sponsors

Assets in $ millions

1. TIAA-CREF	83,100	
2. California Public Employees	54,000	
3. New York State & Local	43,737	
4. New York City	40,763	
5. AT&T	38,876	
6. General Motors	36,300	
7. California State Teachers	30,140	
8. General Electric	27,108	
9. New York State Teachers	26,689	
10. New Jersey	26,609	
11. IBM	25,000	
12. Texas Teachers	23,734	
13. Ford Motor	20,800	
14. Ohio Public Employees	20,595	
15. Florida State Board	19,268	
16. Wisconsin State Board	18,482	
17. Ohio State Teachers	18,200	
18. Du Pont	17,728	
19. North Carolina Retirement	17,289	
20. State of Michigan	17,268	
21. Pennsylvania Public School	17,268	
22. NYNEX	14,383	
23. BellSouth	14,125	
24. Bell Atlantic	13,943	
25. Ameritech	13,241	
26. Washington State Board	12,839	
27. University of California	12,471	
28. Minnesota State Board	12,098	
29. GTE	11,825	
30. Boeing	11,600	
31. Pacific Telesis	10,896	
32. Maryland State Retirement	10,761	
33. Virginia Retirement	10,687	
34. Los Angeles County	10,362	
35. Oregon Public Employes	9,900	
36. Georgia Teachers	9,871	
37. Rockwell International	9,715	
38. Pennsylvania State Employes	9,485	
39. Teamsters, Central States	9,398	
40. Teamsters, Western Conference	9,292	
41. Colorado Public Employees	9,195	
42. Eastman Kodak	9,000	
43. Alabama Retirement Systems	8,827	
44. USX	8,750	
45. United Nations	8,591	
46. Southwestern Bell	8,303	
47. Illinois Teachers	8,175	
48. Tennessee Consolidated	8,148	
49. U S WEST	7,998	
50. Lockheed	7,963	
51. United Technologies	7,960	
52. Connecticut Trust Funds	7,902	
53. Exxon	7,838	
54. South Carolina Retirement	7,728	
55. Shell Oil	7,507	
56. Arizona State Retirement	7,234	
57. Sears, Roebuck	7,186	
58. Chevron	7,157	
59. McDonnell Douglas	7,023	
60. Philip Morris	6,983	
61. Federal Retirement Thrift	6,890	
62. Mass. Teachers/Employees	6,650	
63. Hughes Aircraft	6,300	
64. Texas Employees	6,242	
65. Procter & Gamble	6,078	
66. General Dynamics	6,069	
67. Prudential Insurance	5,856	
68. Missouri Public School	5,800	
69. Allied-Signal	5,770	
70. Westinghouse Electric	5,554	
71. Chrysler	5,096	
72. Iowa Public Employees	4,916	
73. United Mine Workers	4,759	
74. Mobil Oil	4,675	
75. Amoco	4,665	
76. Unisys	4,534	
77. Alaska State	4,430	
78. San Francisco City/County	4,331	
79. Mississippi Public Employees	4,319	
80. Illinois Municipal	4,239	
81. Caterpillar	4,221	
82. Pacific Gas & Electric	4,172	
83. Hawaii Employees	4,119	
84. Monsanto	4,055	
85. Dow Chemical	4,000	
86. United Airlines	4,000	
87. Delta Air Lines	3,977	
88. Illinois State Universities	3,959	
89. Detroit Retirement Systems	3,925	
90. Utah State Retirement	3,850	
91. American Airlines	3,800	
92. Kansas Public Employees	3,751	
93. Georgia Employees	3,750	
94. National Electrical Contractors	3,692	
95. Kentucky Teachers Retirement	3,678	
96. Chicago School	3,611	
97. Atlantic Richfield	3,575	
98. Los Angeles Fire & Police	3,459	
99. United Methodist Church	3,459	
100. Louisiana Teachers' Retirement	3,457	
101. Metropolitan Life	3,395	
102. RJR Nabisco	3,364	
103. Southern Co. Services	3,350	
104. Xerox	3,333	
105. Nevada Public Employees	3,308	
106. Northrop	3,304	
107. Kentucky Retirement Systems	3,300	
108. Martin Marietta	3,300	
109. Texaco	3,300	
110. Minnesota Mining & Mfg.	3,288	
111. ALCOA	3,270	
112. Consolidated Edison	3,257	
113. State Farm	3,240	
114. World Bank	3,171	
115. Indiana Public Employees	3,104	
116. Grumman	3,101	
117. Ohio Police & Firemen	3,101	
118. Bethlehem Steel	3,080	
119. Illinois State Board	3,045	
120. ITT	2,990	
121. Raytheon	2,982	
122. J.C. Penney	2,964	
123. Textron	2,961	
124. Honeywell	2,839	
125. Tennessee Valley Authority	2,834	
126. Ohio School Employees	2,824	
127. Tenneco	2,824	
128. TRW	2,783	
129. Aetna	2,758	
130. Mass. PRIM	2,700	
131. Southern Baptist	2,680	
132. International Paper	2,673	
133. Eli Lilly	2,670	
134. Los Angeles City	2,620	
135. Union Carbide	2,608	
136. Deere	2,450	
137. Phillips Petroleum	2,450	
138. Texas Municipal	2,400	
139. Boilermaker-Blacksmith	2,395	
140. Owens-Illinois	2,326	
141. Rhode Island Retirement System	2,322	
142. Presbyterian Church	2,300	
143. S. California Edison	2,300	
144. Texas County & District	2,297	
145. Trans World Airlines	2,282	
146. Halliburton	2,260	
147. BP America	2,235	
148. Louisiana State Employees	2,234	
149. Arkansas Teachers	2,216	
150. Abbott Laboratories	2,210	
151. Eastern Air Lines	2,150	
152. National Rural Electric Co-op	2,120	
153. Operating Engineers	2,114	
154. Oklahoma Teachers Retirement	2,097	
155. S. California UFCW	2,073	
156. Bakery & Confectionery Union	2,070	
157. Chicago Municipal	2,068	
158. Commonwealth Edison	2,029	
159. United Parcel Service	2,026	
160. Motorola	2,019	
161. PPG Industries	2,011	
162. Citibank	2,006	
163. Navistar	2,005	
164. Indiana State Teachers	2,000	
165. Armco	1,995	
166. New Mexico Educational	1,990	
167. Anheuser-Busch	1,986	
168. Travelers Insurance	1,980	
169. Hospital & Health Care	1,932	
170. New Mexico Public Employees	1,860	
171. American Stores	1,854	
172. Episcopal Church	1,850	
173. Los Angeles Water & Power	1,850	
174. Inland Steel	1,848	
175. American Electric Power	1,842	
176. Maine State Retirement	1,837	
177. Evangelical Lutheran	1,833	
178. FPL Group	1,823	
179. Cooper Industries	1,740	
180. Delaware State	1,733	
181. S. New England Telephone	1,729	
182. Eaton	1,715	
183. CIGNA	1,711	
184. NCR	1,700	
185. Sheet Metal Workers	1,686	
186. New York Life	1,674	
187. Digital Equipment	1,652	
188. Johnson & Johnson	1,650	
189. I.A.M. National	1,646	
190. K mart	1,643	
191. Idaho Public Employees	1,637	
192. Equitable Life	1,635	
193. Bechtel Power	1,618	
194. Carpenters, N. California	1,606	
195. Consolidated Natural Gas	1,607	
196. Georgia-Pacific	1,602	
197. Hercules	1,600	
198. United Telecommunications	1,588	
199. GenCorp	1,583	
200. Chicago Policemen	1,571	
Total	$1,415,5[illegible]	

Ranking of funds/sponsors 201-1,000

Assets in $ millions

Rank	Fund/sponsor	Location	Assets
201.	Milwaukee City	Milwaukee	1,553
202.	Nat'l Plumbers	Cheverly, Md.	1,546
203.	Ralston-Purina	St. Louis	1,546
204.	Missouri State	Jefferson City	1,536
205.	Teledyne	Los Angeles	1,532
206.	Philadelphia Municipal	Philadelphia	1,520
207.	Hallmark Cards	Kansas City, Mo.	1,515
208.	Chase Manhattan	New York	1,507
209.	Baltimore City	Baltimore	1,500
210.	Montana State Board	Helena	1,500
211.	Pan American Airways	New York	1,497
212.	U.S. Air	Arlington, Va.	1,493
213.	Nat'l Auto Dealers	McLean, Va.	1,476
214.	Houston Retirement	Houston	1,470
215.	ILGWU	New York	1,470
216.	John Hancock	Boston	1,465
217.	Cook County Emp.	Chicago	1,461
218.	Kaiser Permanente	Oakland, Calif.	1,461
219.	Pacific Enterprises	Los Angeles	1,461
220.	Wyoming Retirement	Cheyenne	1,455
221.	District of Columbia	Washington	1,450
222.	Philadelphia Electric	Philadelphia	1,449
223.	BankAmerica	San Francisco	1,445
224.	Texas Instruments	Dallas	1,443
225.	James River	Richmond, Va.	1,437
226.	South Dakota	Pierre	1,420
227.	Orange County	Santa Ana, Calif.	1,416
228.	Sandia Nat'l Labs	Albuquerque	1,416
229.	North American Philips	New York	1,410
230.	Army & Air Force	Dallas	1,403
231.	Hewlett-Packard	Palo Alto, Calif.	1,402
232.	Emerson Electric	St. Louis	1,400
233.	N. England Teamsters	Boston	1,400
234.	Unocal	Los Angeles	1,392
235.	N.Y. Carpenters	New York	1,379
236.	Northwest Airlines	St. Paul, Minn.	1,375
237.	Sun Co.	Radnor, Pa.	1,373
238.	Federated Dept. Stores	Cincinnati	1,361
239.	YMCA	New York	1,350
240.	American Cyanamid	Wayne, N.J.	1,335
241.	Mass. Institute of Tech.	Cambridge	1,335
242.	Michigan Municipal	Lansing	1,327
243.	Financial Institutions	White Plns, N.Y.	1,321
244.	Oklahoma Employees	Oklahoma City	1,318
245.	Bayer USA	Pittsburgh	1,300
246.	Elec. Products Indus.	Flushing, N.Y.	1,300
247.	Op. Eng. #12	Pasadena, Calif.	1,300
248.	Warner Lambert	Mor. Plains, N.J.	1,300
249.	SmithKline Beecham	Philadelphia	1,293
250.	Arkansas Employees	Little Rock	1,292
251.	Dun & Bradstreet	New York	1,291
252.	Pfizer	New York	1,288
253.	Arizona Public Safety	Phoenix	1,285
254.	Unilever USA	New York	1,282
255.	Goodyear Tire	Akron, Ohio	1,278
256.	Litton Indus.	Beverly Hills	1,270
257.	Champion Int'l	Stamford, Conn.	1,269
258.	General Public Utilities	Reading, Pa.	1,255
259.	Op. Eng. #302, 612	Seattle	1,251
260.	Deseret Mutual	Salt Lake City	1,247
261.	West Virginia	Charleston	1,246
262.	LTV	Dallas	1,227
263.	N. Calif. Retail Clerks	Walnut Creek	1,237
264.	Merck	Rahway, N.J.	1,227
265.	Op. Eng. #2	San Francisco	1,223
266.	Public Service E&G	Newark, N.J.	1,221
267.	Bristol-Myers Squibb	New York	1,219
268.	Armstrong World Indus.	Lancaster, Pa.	1,217
269.	General Public Utilities	Parsippany, N.J.	1,200
270.	Int'l Monetary Fund	Washington	1,200
271.	Kimberly-Clark	Dallas	1,200
272.	Texas Utilities	Dallas	1,200
273.	Scott Paper	Philadelphia	1,190
274.	Weyerhauser	Tacoma, Wash.	1,186
275.	Nat'l Laborers	Dallas	1,181
276.	Occidental Petroleum	Los Angeles	1,178
277.	PepsiCo	Purchase, N.Y.	1,178
278.	Quaker Oats	Chicago	1,160
279.	MEBA	Baltimore	1,141
280.	Corning	Corning, N.Y.	1,140
281.	General Mills	Minneapolis	1,136
282.	Coastal	Houston	1,135
283.	McDermott Int'l	New Orleans	1,131
284.	Union Pacific	Bethlehem, Pa.	1,125
285.	Reynolds Metals	Richmond, Va.	1,123
286.	W.R. Grace	New York	1,110
287.	Upjohn	Kalamazoo, Mich.	1,104
288.	ARAMCO Services	Houston	1,100
289.	BASF	Parsippany, N.J.	1,100
290.	Rohm & Haas	Philadelphia	1,100
291.	Hoechst Celanese	Somerville, N.J.	1,092
292.	Hanson Indus.	Iselin, N.J.	1,088
293.	Federal Express	Memphis, Tenn.	1,081
294.	Nebraska State	Lincoln	1,081
295.	Nat'l Auto. Sprinkl. #669	Landover, Md.	1,079
296.	Times Mirror	New York	1,079
297.	Conrail	Atlanta	1,069
298.	Nat'l Maritime Union	New York	1,066
299.	Continental Can	Norwalk, Conn.	1,061
300.	San Diego County	San Diego	1,057
301.	American Red Cross	Alexandria, Va.	1,054
302.	American Brands	Old Grnwich	1,053
303.	Cummins Engine	Columbus, Ind.	1,053
304.	Columbia Gas System	Wilmington, Del.	1,049
305.	Manufacturers Hanover	New York	1,044
306.	Detroit Edison	Detroit	1,043
307.	Bicoastal	Tampa, Fla.	1,042
308.	Coca-Cola	Atlanta	1,035
309.	Boise Cascade	Boise, Idaho	1,032
310.	New Hampshire	Concord	1,027
311.	Kroger	Cincinnati	1,026
312.	Westvaco	New York	1,022
313.	Ingersoll-Rand	W'cliff Lk., N.J.	1,021
314.	May Dept. Stores	St. Louis	1,015
315.	American Nat'l Can	Chicago	1,011
316.	Motion Picture Industry	Studio City, Calif.	1,011
317.	Whirlpool	Bent. Har., Mich.	1,009
318.	Olin	Stamford, Conn.	1,004
319.	Hoffmann-LaRoche	Nutley, N.J.	1,003
320.	CBS	New York	1,000
321.	Fluor	Irvine, Calif.	1,000
322.	Baltimore County	Baltimore	997
323.	CIBA-GEIGY	Ardsley, N.Y.	986
324.	Dana	Toledo, Ohio	980
325.	Liberty Mutual	Boston	980
326.	FMC	Chicago	976
327.	S. Calif. Carpenters	Los Angeles	977
328.	San Jose City	San Jose, Calif.	975
329.	Manville	Denver	973
330.	Montgomery Ward	Chicago	973
331.	Sacramento County	Sacramento, Cal.	960
332.	Bell Communications	Livingston, N.J.	952
333.	Marsh & McLennan	New York	951
334.	Central & South West	Dallas	940
335.	Brown & Williamson	Louisville, Ky.	939
336.	Northern States Power	Minneapolis	935
337.	Asea Brown Boveri	Stamford, Conn.	930
338.	Polaroid	Cambridge	929
339.	Ashland Oil	Ashland, Ky.	927
340.	Tribune Co.	Chicago	923
341.	Schlumberger	New York	922
342.	Northeast Utilities	Hartford, Conn.	921
343.	Campbell Soup	Camden, N.J.	918
344.	Capital Group	Los Angeles	916
345.	S. Calif. Rapid Transit	Los Angeles	916
346.	CSX	Richmond, Va.	915
347.	Safeway	Oakland, Calif.	914
348.	ICI Americas	Wilmington, Del.	908
349.	Colgate-Palmolive	New York	907
350.	Capital Cities/ABC	New York	905
351.	Denver Public Schools	Denver	900
352.	Boston Retirement	Boston	897
353.	Whitman	Chicago	895
354.	San Diego City	San Diego	894
355.	Niagara Mohawk Power	Syracuse, N.Y.	892
356.	Blue Cross/Shield Nat'l	Chicago	891
357.	United Church Board	New York	885
358.	Nat'l Elevator Indus.	Philadelphia	884
359.	Time Warner	New York	879
360.	R.R. Donnelley	Chicago	875
361.	Conrail	Philadelphia	873
362.	Chicago Transit Auth.	Chicago	871
363.	Entergy	New Orleans	870
364.	Arthur Andersen	Chicago	863
365.	Steelcase	Grand Rapids	863
366.	Norfolk Southern	Norfolk, Va.	862
367.	Kellogg	Battle Crk., Mich.	857
368.	San Bernardino County	S. Bern., Calif.	855
369.	Healthtrust	Nashville, Tenn.	854
370.	Pacific Maritime Assoc.	San Francisco	852
371.	Minneapolis Employees	Minneapolis	846
372.	Cincinnati City	Cincinnati	845
373.	Lutheran-Missouri	St. Louis	843
374.	Parsons Corp.	Pasadena, Calif.	842
375.	Collec Industries	New York	840
376.	Mars	McLean, Va.	839
377.	Mead	Dayton, Ohio	839
378.	American Home Prod.	New York	838
379.	Panhandle Eastern	Houston	838
380.	Ernst & Young	New York	835
381.	Alameda County	Oakland, Ca	834
382.	Greyhound Lines Amal.	W. Des Moines	833
383.	Central Pa. Teamsters	Reading	832
384.	Pillsbury	Minneapolis	825
385.	N. Calif. Laborers	Suisun	824
386.	UFCW #27	Baltimore	823
387.	Fairfax County	Fairfax, Va.	822
388.	Borden	Columbus, Ohio	819
389.	Winn Dixie	Jacksonville, Fla.	819
390.	Jefferson Smurfit	St. Louis	814
391.	Service Emp. #32B, 32J	New York	813
392.	Wal-Mart	Bentonville, Ark.	810
393.	Black & Decker	Towson, Md.	803
394.	Nat'l Steel	Pittsburgh	800
395.	N. Dakota State	Bismarck	800
396.	UFCW Nat'l	Chicago	798
397.	Lear Siegler	Livingston, N.J.	796
398.	Enron	Houston	795
399.	Op. Eng. #18	Cleveland	792
400.	Duke Power	Charlotte, N.C.	791
401.	Gillette	Boston	787
402.	Consumers Power	Jackson, Mich.	786
403.	Goldman, Sachs	New York	786
404.	Cincinnati Bell	Cincinnati	785
405.	DeLuxe	St. Paul, Minn.	785
406.	Ethyl	Richmond, Va.	782
407.	Lumber Prod., W. Cncl.	Portland, Ore.	781
408.	Pennsylvania P&L	Allentown	779
409.	Stone & Webster	New York	777
410.	Mass. Bay Transit	Boston	772
411.	Teamsters #705	Chicago	770
412.	Harris	Melbourne, Fla.	766
413.	Midwest Op. Eng. #150	Countryside, Ill.	765
414.	Graphic Comms. Int'l	Washington	760
415.	Chicago Carpenters	Chicago	757
416.	EG&G	Wellesley, Mass.	753
417.	Centerior Energy	Indep., Ohio	752
418.	Contra Costa County	Concord, Calif.	744
419.	Dallas Employees	Dallas	742
420.	MITRE	Bedford, Mass.	742
421.	E-Systems	Dallas	741
422.	Calif. Iron Wrkrs.	San Marino	741
423.	Gannett	Arlington, Va.	740
424.	Control Data	Minneapolis	736
425.	Wayne County	Detroit	736
426.	PacifiCorp	Portland, Ore.	728
427.	Comm. Wrkrs./Int'l Typ.	Colorado Springs	727
428.	Budd	Troy, Mich.	725
429.	A.H. Belo	Dallas	724
430.	Longshoremen Int'l	New York	723
431.	Santa Fe Pacific	Chicago	722
432.	Farmland Industries	Kansas City, Mo.	721
433.	Kaiser Alum. & Chem.	Oakland, Calif.	721
434.	Baltimore G&E	Baltimore	718
435.	Montgomery County	Rockville, Md.	716
436.	Milwaukee County	Milwaukee	713
437.	Laborers & Retirement	Chicago	708
438.	Graphic Arts #458	Chicago	707
439.	Masters, Mates & Pilots	Linth. Hts., Md.	707
440.	Western Union	Up. Sad. Ri., N.J.	706
441.	Ohio Edison	Akron	701
442.	Burlington Resources	Seattle	700
443.	Dayton Hudson	Minneapolis	695
444.	Johnson Controls	Milwaukee	695
445.	Jacksonville City	Jacksonville, Fla.	694
446.	General Signal	Stamford, Conn.	687
447.	Nalco Chemical	Naperville, Ill.	686
448.	Union Camp	Wayne, N.J.	686
449.	Arthur D. Little	Cbridge, Mass.	683
450.	Louisiana Schools	Baton Rouge	674
451.	Memphis City	Memphis, Tenn.	674
452.	Sundstrand	Rockford, Ill.	674
453.	Schering-Plough	Madison, N.	671
454.	American Fed. Radio/TV	New York	668
455.	Ohio Laborers	Columbus	668
456.	Colorado Fire & Police	Englewood	667
457.	White Consolidated	Cleveland	667
458.	Battelle	Columbus, Ohio	665
459.	Screen Actors/Prod.	Burbank, Calif.	665
460.	Household Int'l	Prospect Hts., Ill.	664
461.	Navy Resale & Services	Staten Isl., N.Y.	658
462.	Major League Players	New York	657
463.	Peoples Energy	Chicago	657
464.	Amster	N. Haven, Conn.	655
465.	Missouri Local Gov't	Jefferson City	650
466.	Owens-Corning	Toledo, Ohio	650
467.	Southland	Dallas	650
468.	Chicago Laborers	Forest Park, Ill.	647
469.	Bridgestone/Firestone	Akron, Ohio	646
470.	Tektronix	Beaverton, Ore.	645
471.	Atochem	Philadelphia	643
472.	Marriott	Washington	642
473.	New York State G&E	Ithaca	641

Ranking of funds/sponsors 201-1,000

Assets in $ millions

Rank	Fund/sponsor	Location	Assets
474.	GCIU-Employer	El Monte, Calif.	639
475.	Oryx Energy	Dallas	638
476.	KPMG Peat Marwick	Montvale, N.J.	636
477.	Teamsters #282	Elmont, N.Y.	636
478.	Aerospace Corp.	El Segundo, Cal.	635
479.	Dominion Resources	Richmond, Va.	635
480.	Detroit Carpenters	Ferndale, Mich.	634
481.	Burlington Indus.	Greensboro, N.C.	632
482.	RSSI	New York	627
483.	Sara Lee	Chicago	625
484.	Teamsters #710	Chicago	624
485.	Brunswick	Skokie, Ill.	618
486.	Farley Indus.	Chicago	616
487.	Quantum Chemical	New York	616
488.	AMP	Harrisburg, Pa.	615
489.	Hospital Corp.	Nashville, Tenn.	613
490.	Norton	Worcester, Mass.	611
491.	Carolina P&L	Raleigh, N.C.	608
492.	Elec. Wrkrs., Int'l HQ	Washington	608
493.	N. England Electric	W'boro, Mass.	604
494.	Maytag	Newton, Iowa	602
495.	Northern Telecom	Nashville, Tenn.	601
496.	Publix Super Markets	Lakeland, Fla.	601
497.	Allegheny Power	New York	600
498.	Beazer East	Pittsburgh	598
499.	GCIU Inter-Local	Chicago	598
500.	Sherwin-Williams	Cleveland	596
501.	McKesson	San Francisco	592
502.	B.F.Goodrich	Akron, Ohio	590
503.	Am. Fed.-Musicians	New York	588
504.	Milliken	Spart'burg, S.C.	586
505.	Houston Indus.	Houston	583
506.	Paper Indus. Int'l	Nashville, Tenn.	580
507.	Cleveland-Cliffs	Cleveland	579
508.	McDonald's	Oak Brook, Ill.	577
509.	Atlanta City	Atlanta	576
510.	Washington Post	Washington	576
511.	Ventura County	Ventura, Calif.	575
512.	Ohio Carpenters	Cleveland	572
513.	UFCW/Butchers	Oakland, Calif.	570
514.	H.J. Heinz	Pittsburgh	570
515.	Union Electric	St. Louis	570
516.	Baton Rouge Police	Baton Rouge, La.	569
517.	Directors Guild	Los Angeles	569
518.	Florida Progress	St. Petersburg	567
519.	Beatrice	Chicago	565
520.	Laborers Int'l HQ	Washington	562
521.	Timken	Canton, Ohio	555
522.	Avon Products	New York	553
523.	Johnson & Higgins	New York	553
524.	Sandoz	New York	553
525.	Transco Energy	Houston	550
526.	Paramount Comm.	New York	549
527.	McGraw-Hill	New York	548
528.	Westinghouse Hanford	Richland, Wash.	547
529.	Roadway Services	Cleveland	546
530.	Wisconsin Elec. Power	Milwaukee	544
531.	N.Y. State Teamsters	Utica	543
532.	Automotive Indus.	Oakland, Calif.	542
533.	Michigan Consol. Gas	Detroit	540
534.	UFCW Int'l HQ	Washington	540
535.	CPC Int'l	Englew'd Cl., N.J.	539
536.	Atlanta UFCW	Atlanta	539
537.	Sht. Metal Wrkrs. #108	Los Angeles	539
538.	Premark Int'l	Deerfield, Ill.	536
539.	Borg-Warner	Chicago	533
540.	Parker-Hannifin	Cleveland	533
541.	Andersen	Bayport, Minn.	531
542.	S. Calif. Elec. Wrkrs.	Los Angeles	531
543.	Thiokol	Ogden, Utah	528
544.	Long Island Lighting	Hicksville, N.Y.	525
545.	Chicago Firemen	Chicago	522
546.	McKinsey	New York	521
547.	R.H. Macy	New York	516
548.	Seattle City	Seattle	516
549.	Inter-Am. Dev. Bank	New York	515
550.	Walgreen	Deerfield, Ill.	515
551.	Pitney-Bowes	Stamford, Conn.	514
552.	Moore Business Forms	Glenview, Ill.	512
553.	Air Prod. & Chem.	Allentown, Pa.	510
554.	Aon	Chicago	510
555.	Longshore/ILWU/PMA	San Francisco	510
556.	Mack Trucks	Allentown, Pa.	509
557.	Cargill	Minneapolis	505
558.	San Diego G&E	San Diego	504
559.	Woolworth	New York	500
560.	Seafarers	C. Springs, Md.	499
561.	Varian Assoc.	Palo Alto, Calif.	492
562.	Cincinnati G&E	Cincinnati	491
563.	Fresno County	Fresno, Calif.	491
564.	Carpenter Technology	Reading, Pa.	486
565.	Colorado Public Service	Denver	484
566.	Mercantile Stores	New York	484
567.	Philadelphia Carpenters	Philadelphia	483
568.	W. Pa. Teamsters	Pittsburgh	480
569.	Centel	Chicago	478
570.	N. Ind. Public Service	Hammond	477
571.	Pittsburgh Nat'l Bank	Pittsburgh	477
572.	Plumb./Pipefitters #597	Chicago	477
573.	Delmarva P&L	Wilmington, Del.	476
574.	Briggs & Stratton	Milwaukee	475
575.	Am. Cotton Gar. Wrkrs.	New York	473
576.	Chicago Elec. Cont.	Chicago	473
577.	Nat'l Telephone Co-op	Washington	472
578.	N. Illinois Gas	Aurora, Ill.	472
579.	A.O. Smith	Milwaukee	472
580.	Stanley Works	N. Britain, Conn.	472
581.	Bull HN Information	Billerica, Mass.	470
582.	Fort Worth Emp.	Ft. Worth, Texas	466
583.	Becton Dickinson	Frklin Lks., N.J.	465
584.	Phelps Dodge	Phoenix, Ariz.	464
585.	Phoenix City	Phoenix, Ariz.	464
586.	Masco/Trimas	Taylor, Mich.	463
587.	Alcan Aluminum	C'bridge, Mass.	461
588.	Missouri Highway	Jefferson City	461
589.	Teamsters Affiliates	Washington	460
590.	EDS	Dallas	459
591.	Op. Eng. #15	New York	457
592.	Reader's Digest	Pleas'tville, N.Y.	457
593.	Op. Eng. #324	Birm'ham,Mich.	455
594.	San Joaquin County	Stockton, Calif.	455
595.	Denver Emp.	Denver	453
596.	MCI Communications	Washington	453
597.	Belk/Leggett Stores	Charlotte, N.C.	450
598.	Lincoln Nat'l	Fort Wayne, Ind.	450
599.	Interco	St. Louis	447
600.	Alaska Teamsters	Anchorage	446
601.	San Mateo County	R'wood City, Cal.	445
602.	Building Service	San Francisco	443
603.	Gerber Products	Fremont, Mich.	443
604.	Philadelphia Teamsters	Philadelphia	442
605.	Joseph E. Seagram	New York	441
606.	Kern County	Bakersfield, Calif.	440
607.	N. Cal. Sht. Metal Wkrs.	San Francisco	440
608.	Square D	Palatine, Ill.	440
609.	Consol. Freightways	Pal Alto, Calif.	439
610.	Lab./S. Calif. Plstrs.	Los Angeles	439
611.	W. Pa. Laborers	Pittsburgh	439
612.	Illinois Tool Works	Glenview	438
613.	Flint City	Flint, Mich.	435
614.	American Express	New York	434
615.	USAA Investment	S. Antonio, Texas	432
616.	Midwest UFCW	Chicago	429
617.	USG	Chicago	429
618.	Dallas Police & Fire	Dallas	428
619.	Arizona Public Service	Phoenix	426
620.	La. Municipal Police	Baton Rouge	425
621.	Nat'l Intergroup	Pittsburgh	425
622.	V F Corp.	Reading, Pa.	425
623.	Hearst	New York	424
624.	Western Metal Indus.	Seattle	422
625.	Hotel/Rest. Wrkrs. #165	Las Vegas, Nev.	421
626.	Springs Industries	Fort Mill, S.C.	420
627.	Rohr Indus.	Chula Vista, Calif.	419
628.	Oklahoma Firefighters	Oklahoma City	418
629.	Towers, Perrin	Philadelphia	418
630.	Op. Eng. #825	Newark, N.J.	417
631.	Sonat	Birmingham, Ala.	416
632.	Gates Rubber	Denver	415
633.	Hartford City	Hartford, Conn.	415
634.	Brooklyn Union Gas	Brooklyn, N.Y.	413
635.	Longshore/STA-ILA	Baltimore	412
636.	Minneapolis Teachers	Minneapolis	412
637.	American Standard	New York	408
638.	S. Calif. Pipe Trades	Los Angeles	408
639.	Henley Group	Hampton, N.H.	407
640.	Cincinnati Milacron	Cincinnati	406
641.	Alaska Laborers	Seattle	405
642.	Boston Edison	Boston	404
643.	Wickes	S. Monica, Calif.	404
644.	Chicago Sanitary Dist.	Chicago	403
645.	Knight-Ridder	Miami	403
646.	Rochester G&E	Rochester, N.Y.	403
647.	S. Antonio Public Ser.	S. Antonio, Texas	403
648.	UFCW #1001	Bellevue, Wash.	401
649.	Boy Scouts	Irving, Texas	400
650.	Brick./Trowel Trades	Washington	397
651.	Bldg. Trades United	Milwaukee	397
652.	Auto Wkrs., Nat'l HQ	Detroit	396
653.	Memphis LG&W	Memphis, Tenn.	392
654.	St. Louis Schools	St. Louis	392
655.	TRINOVA	Maumee, Ohio	392
656.	Nestle Food	Purchase, N.Y.	389
657.	Oklahoma Police	Oklahoma City	389
658.	Loral	New York	388
659.	United Services Auto	S. Antonio, Texas	388
660.	ENSERCH	Dallas	387
661.	George Hormel	Austin, Minn.	387
662.	Mass. Carpenters	Wilmington	385
663.	Newell	Freeport, Ill.	385
664.	Washington Area Trans.	Washington	385
665.	La. Parochial Emp.	Natchitoches	382
666.	Equifax	Atlanta	381
667.	Humana	Louisville, Ky.	381
668.	S. Calif. Permanente	Pasadena	381
669.	Nat'l Industrial Group	Newark, N.J.	380
670.	Alaska Elec. Wkrs.	Anchorage	379
671.	Potlatch	Walnut Crk., Cal.	377
672.	Miami Fire & Police	Miami	376
673.	Alexander & Alexander	Owings Mills, Md.	375
674.	Austin Employees	Austin, Texas	375
675.	Sequa	New York	375
676.	Ohio & Vic. Iron Wkrs.	Ch'leston, W. Va.	373
677.	Williams Co.	Tulsa, Okla.	373
678.	Nat'l Football League	New York	372
679.	Coca-Cola Enterprises	Atlanta	371
680.	Steelworkers Nat'l HQ	Pittsburgh	371
681.	Vulcan Materials	Birmingham, Ala.	371
682.	Adolph Coors	Golden, Colo.	370
683.	Dan River	Danville, Va.	370
684.	S.C. Johnson	Racine, Wis.	370
685.	Revlon	New York	368
686.	Burroughs-Wellcome	Res.Tri.Pk., N.C.	366
687.	Loews	New York	366
688.	Hawaiian Electric	Honolulu	365
689.	Perkin-Elmer	Norwalk, Conn.	365
690.	Producer-Writers Guild	Burbank, Calif.	364
691.	N.Y. Cultural Inst.	New York	360
692.	Salt River Project	Phoenix, Ariz.	360
693.	St. Louis Police	St. Louis	360
694.	Potomac Electric Power	Washington	357
695.	Washington Gas Light	Washington	357
696.	N. N.J. Iron Wkrs.	Newark	356
697.	Dresser	Dallas	355
698.	UFCW #7	Wh't Ridge, Colo.	354
699.	Graybar Electric	St. Louis	354
700.	Gulf States Utilities	Beaumont, Texas	354
701.	Iron Wkrs. #40/361/417	New York	354
702.	Carpenters, Int'l HQ	Washington	353
703.	First Bank System	Minneapolis	351
704.	Harris Pump & Supply	Pittsburgh	351
705.	Science Applic. Int'l	San Diego	351
706.	Syntex	Palo Alto, Calif.	351
707.	Hershey Foods	Hershey, Pa.	350
708.	National Fuel Gas	Buffalo, N.Y.	350
709.	Rio Grande Indus.	Denver	350
710.	Amerada Hess	New York	349
711.	J.M. Huber	Edison, N.J.	349
712.	Service Emp. #144	New York	349
713.	Libbey-Owens-Ford	Toldeo, Ohio	348
714.	Reliance Electric	M'field Hts., Ohio	348
715.	Maritime Assoc./ILA	Houston	347
716.	A.G. Edwards	St. Louis	346
717.	E. Baton Rouge Emp.	Baton Rouge, La.	345
718.	Tampa Fire & Police	Tampa, Fla.	345
719.	Maryland Supple.	Baltimore	344
720.	Clark Equipment	South Bend, Ind.	342
721.	Rochester Telephone	Rochester, N.Y.	341
722.	Vermont State	Montpelier	341
723.	Agway	Syracuse, N.Y.	340
724.	Fresno City	Fresno, Calif.	340
725.	Kansas P&L	Topeka	339
726.	Kerr-McGee	Oklahoma City	338
727.	MAPCO	Tulsa, Okla.	338
728.	Ryder System	Miami	338
729.	Consolidated Papers	Wis. Rapids, Wis.	335
730.	Cyclops Indus.	Pittsburgh	334
731.	Dillon	Hutchinson, Kan.	334
732.	Comm. Clearing House	Riverwoods, Ill.	330
733.	Santa Barbara County	S. Barbara,Calif.	330
734.	Textile Wkrs., Nat'l HQ	New York	329
735.	Carnation	Glendale, Calif.	327
736.	Zenith Electronic	Chicago	327
737.	Auto Wkrs. Dist. #85	New York	326
738.	Laborers #23, 13	New York	326
739.	Alco Standard	Valley Forge, Pa.	325
740.	Machinists #9	Bridgeton, Mo.	325
741.	Primerica	Baltimore	324
742.	Royal Insurance	Charlotte, N.C.	324
743.	ALLTEL	Little Rock, Ark.	322
744.	Birmingham City	Birmingham, Ala.	322
745.	Chubb	Warren, N.J.	322
746.	Laborers #253	Jacksonville, Ill.	322

Ranking of funds/sponsors 201-1,000

Assets in $ millions

Rank	Fund/sponsor	Location	Assets
747.	Morton Int'l	Chicago	320
748.	Nat'l Gypsum	Dallas	319
749.	Upholsterers, Int'l	Philadelphia	319
750.	Duquesne Light	Pittsburgh	318
751.	Actors Eq. Screen Extr.	New York	317
752.	Laborers #472, 172	Newark, N.J.	317
753.	Lowe's Co.	N. Wilkesb., N.C.	317
754.	Pechiney	Gr'nwich, Conn.	317
755.	First Boston	New York	316
756.	Nash./Davidson Cnty	Nashville, Tenn.	316
757.	TECO Energy	Tampa, Fla.	314
758.	Fort Howard Paper	Green Bay, Wis.	312
759.	Intel	S. Clara, Calif.	312
760.	Auto Machinists #289	Seattle	312
761.	Scana	Columbia, S.C.	312
762.	Sonoco Prod.	Hartville, S.C.	312
763.	American Insurance	Washington	311
764.	Commonwealth Energy	C'bridge, Mass.	311
765.	Marmon Group	Chicago	311
766.	Moorman Mfg.	Quincy, Ill.	311
767.	Oakland County	Pontiac, Mich.	311
768.	Elec. Wkrs. #332	San Jose, Calif.	310
769.	Chicago Park Emp.	Chicago	309
770.	Fireman's Fund	Novato, Calif.	309
771.	Gould	Eastlake, Ohio	308
772.	Tecumseh Products	Tecumseh, Mich.	308
773.	W. Wash. Crpntrs.	Seattle	307
774.	Ball	Muncie, Ind.	306
775.	Oakland Municipal	Oakland, Calif.	306
776.	New York Times	New York	305
777.	Cox Enterprises	Atlanta	304
778.	S. Antonio Fire & Police	S. Antonio, Texas	304
779.	Portland Electric	Portland, Ore.	303
780.	Teamsters #182	Utica, N.Y.	303
781.	Outboard Marine	Waukegan, Ill.	302
782.	Leo Burnett	Chicago	301
783.	DeKalb County Emp.	Decatur, Ga.	300
784.	Fairfax County Schools	Springfield, Va.	300
785.	Arlington County	Arlington, Va.	298
786.	Mass. Laborers	Newton	297
787.	World Color Press	Effingham, Ill.	296
788.	PaineWebber	Weehawken, N.J.	295
789.	American Water Works	Voorhess, N.J.	294
790.	Elf Aquitaine	Stamford, Conn.	293
791.	Marion Merrell Dow	Kansas City, Mo.	293
792.	Super Valu Stores	E. Prairie,Minn.	293
793.	AMFAC	San Francisco	292
794.	Op. Eng. #542	Norristown, N.J.	292
795.	Marin County	San Rafael, Calif.	291
796.	Wrigley Co.	Chicago	291
797.	Twin Cities Carpenters	Minneapolis	290
798.	Plumbers #525	Las Vegas, Nev.	290
799.	U.S. Fidelity & Guaranty	Baltimore	290
800.	Blue Cross/Shield Mich.	Detroit	289
801.	Arvin Indus.	Columbus, Ind.	287
802.	Int'l Minerals & Chem.	Northbrook, Ill.	287
803.	Plumbers/Steamfitters	New York	287
804.	Bank of New York	New York	286
805.	Bowater	Darien, Conn.	286
806.	New Jersey Carpenters	Madison	286
807.	ConAgra	Omaha, Neb.	286
808.	St. Louis Employees	St. Louis	286
809.	Tmsters/Mid-Jer. Trkrs.	N. Brunswick	286
810.	Capital Holding	Louisville, Ky.	285
811.	Laborers #731	New York	285
812.	Pittston	Gr'nwich, Conn.	283
813.	Williamette Indus.	Portland, Ore.	283
814.	Avery Int'l	Pasadena, Calif.	281
815.	Grand Union	Wayne, N.J.	281
816.	W. Pa. Carpenters	Pittsburgh	280
817.	Knoxville City	Knoxville, Tenn.	280
818.	Michelin Tire	Greenville, S.C.	280
819.	Wisc. Public Service	Green Bay	279
820.	Illinois Power	Decatur	278
821.	Elec. Wkrs. #1186	Honolulu	276
822.	Sacramento City	Sacramento, Cal.	276
823.	St. Paul Teachers	St. Paul, Minn.	276
824.	Cooper Tire & Ribber	Findlay, Ohio	275
825.	Roofers, Nat'l	Washington	275
826.	BOC Group	Murray Hill, N.J.	274
827.	Illinois Carpenters	Geneva	274
828.	G. Heileman Brewing	LaCrosse, Wis.	274
829.	Hotel Trades Cncl.	New York	274
830.	Savings Bank Emp.	Woburn, Mass.	274
831.	Wichita Retirement	Wichita, Kan.	272
832.	Dow Jones	New York	270
833.	N. Orleans Longshore	New Orleans	269
834.	TBG	New York	269
835.	Prince Georges County	Up. M'boro, Md.	268
836.	Pa. Municipal	Harrisburg	267
837.	Sisters of Providence	Seattle	267
838.	Allis-Chalmers	Milwaukee	266
839.	Elec. Products Indus.	Flushing, N.Y.	265
840.	SPX	Muskegon, Mich.	264
841.	Iron Wkrs. #25	Novi, Mich.	263
842.	S'western Pub. Serv.	Amarillo, Texas	263
843.	ARA Services	Philadelphia	262
844.	Great Lakes Carbon	B'cliff Man., N.Y.	261
845.	Iron Wkrs., Mid-Amer.	Lansing, Ill.	261
846.	United Brands	Cincinnati	261
847.	Indiana Laborers	Terre Haute	260
848.	Simpson Investment	Seattle	260
849.	Witco	W'cliff Lk., N.J.	260
850.	Bemis	Minneapolis	258
851.	Goodwins	B'cliff Man., N.Y.	258
852.	ONEOK	Tulsa, Okla.	258
853.	Puget Sound P&L	Bellvue, Wash.	258
854.	Atlantic City Electric	Atlantic City, N.J.	255
855.	Ohio Casualty	Hamilton	255
856.	Elec. Wkrs. #203	D'chester, Mass.	254
857.	Seattle Iron Wkrs.	Seattle	254
858.	Mass. General Hospital	Boston	254
859.	NVF	Miami Beach	254
860.	MCA	Univ. City, Calif.	252
861.	Harsco	Camp Hill, Pa.	251
862.	Alaska Laborers	Fairbanks	251
863.	Akzo America	New York	250
864.	Blue Cross/Shield-Iowa	Des Moines	250
865.	Food Lion	Salisbury, N.C.	250
866.	Gr. Cleve. Hosp. Assoc.	Cleveland	250
867.	Levi Strauss	San Francisco	250
868.	PACCAR	Bellevue, Wash.	250
869.	N. Ill. Sub. Teamsters	W. Chicago	250
870.	Engelhard	Edison, N.J.	249
871.	S. Cal. UFCW/Drug Em.	Los Angeles	249
872.	Kansas City P&L	Kansas City, Mo.	249
873.	Cent. Ohio UFCW	Columbus	247
874.	UFCW #555	Tigard, Ore.	247
875.	Keystone Consol.	Dallas	247
876.	Questar	Salt Lake City	247
877.	Federal-Mogul	Detroit	246
878.	Foxboro Co.	Foxboro, Mass.	246
879.	Walt Disney	Burbank, Calif.	245
880.	UFCW #576	Kansas City, Mo.	245
881.	Grand Rapids City	Gr. Rapids, Mich.	245
882.	K.C. Public Schools	Kansas City, Mo.	245
883.	Plumb./Steamfitrs #420	Philadelphia	245
884.	Arkla	Shreveport, La.	244
885.	Detroit Laborers	Bir'ham,Mich.	244
886.	Louisiana-Pacific	Portland, Ore.	244
887.	UFCW #464a	Little Falls, N.J.	242
888.	Genuine Parts	Atlanta	242
889.	Indiana Farmers Mutual	Indianapolis	242
890.	Waste Management	Oak Brook, Ill.	242
891.	Teamsters #707	Woodside, N.Y.	241
892.	Banco Popular	San Juan, P.R.	240
893.	Continental Grain	New York	240
894.	Elec. Wkrs. Dist. #3	E. Rutherf'd, N.J.	240
895.	Oklahoma G&E	Oklahoma City	240
896.	Op. Eng. #428	Phoenix, Ariz.	240
897.	Elec. Wkrs. #58	Detroit	239
898.	Omaha Public Power	Omaha, Neb.	239
899.	Lukens	Coatesville, Pa.	238
900.	Painters Dist. #9	New York	238
901.	S. Calif. Cem. Masons	El Monte	238
902.	Indianapolis P&L	Indianapolis	235
903.	N.Y. State Nurses	Albany	235
904.	Op. Eng. #66	Monroeville, Pa.	235
905.	Shelby County	Memphis, Tenn.	235
906.	Wang Labs	Lowell, Mass.	235
907.	GATX	Chicago	234
908.	Hotel Rest. #1	Naperville, Ill.	234
909.	Kansas City Police	Kansas City, Mo.	234
910.	Copley Press	La Jolla, Calif.	233
911.	Rubbermaid	Wooster, Ohio	233
912.	Norfolk City	Norfolk, Va.	231
913.	Sheet Metal Wkrs. #73	Chicago	231
914.	Blue Cross Mass.	Boston	230
915.	Nordstrom	Seattle	228
916.	S. Calif. Auto. Club	Los Angeles	227
917.	Op. Eng. #701	Portland, Ore.	227
918.	Calif. State Auto. Club	San Francisco	226
919.	W.W. Grainger	Skokie, Ill.	226
920.	Sisters of Mercy	Farm. Hills, Mich.	226
921.	Montana Laborers	Great Falls	225
922.	Louisiana Municipal	Baton Rouge	225
923.	Stanislaus County	Modesto, Calif.	225
924.	Kimball Int'l	Jasper, Ind.	224
925.	Machinists #701	Chicago	222
926.	Sedgwick James	New York	222
927.	SKF USA	King/Prussia, Pa.	222
928.	Jack Eckerd	Clearwater, Fla.	221
929.	Ohio Highway Patrol	Columbus	221
930.	Pontiac Retirement	Pontiac, Mich.	221
931.	Deloitte Haskins Sells	New York	220
932.	Minnesota Laborers	Minneapolis	220
933.	Maritime Trades #333	Staten Isl.,N.Y.	220
934.	Mercedes Benz	Montvale, N.J.	220
935.	Omaha Schools	Omaha, Neb.	220
936.	Overnite Transportation	Richmond, Va.	220
937.	Twin Cities Pipe Trds.	St. Paul, Minn.	220
938.	Ark. State Highway	Little Rock	219
939.	Wyatt	Washington	219
940.	Babcock Indus.	Fairfield, Conn.	218
941.	Iron Wkrs. #580	New York	218
942.	Archer Daniels Midland	Decatur, Ill.	217
943.	Asbestos Wkrs. Int'l	Washington	217
944.	Dennison Mfg.	Waltham, Mass.	217
945.	Lincoln Electric	Cleveland	217
946.	Painters Dist. #2	San Francisco	217
947.	Allegheny County	Pittsburgh	215
948.	Fieldcrest Cannon	Eden, N.C.	215
949.	Montgomery Cnty. Ed.	Rockville, Md.	215
950.	Anne Arundel Cnty.	Annapolis, Md.	214
951.	Eastern Enterprises	Weston, Mass.	214
952.	Harnischfeger	Milwaukee	214
953.	Pentair	St. Paul, Minn.	214
954.	Teamsters Cncl. #83	Richmond, Va.	214
955.	American Greetings	Cleveland	213
956.	Koch Indus.	Wichita, Kan.	213
957.	Plumbers #98, 636	Southfield, Mich.	213
958.	Amer. Family Mutual	Madison, Wis.	212
959.	San Diego Carpenters	San Diego	212
960.	Michigan Laborers	Lansing	212
961.	White Castle System	Lansing, Mich.	212
962.	Crown Cork & Seal	Philadelphia	211
963.	Plum. #444/159/342	San Francisco	211
964.	Sony of America	Park Ridge, N.J.	211
965.	Tacoma Employees	Tacoma, Wash.	211
966.	Brown-Forman	Louisville, Ky.	210
967.	Miami Beach Emp.	Miami Beach	210
968.	Minneapolis Police	Minneapolis	210
969.	Penn Central	Cincinnati	210
970.	Teamsters #851	Jamaica, N.Y.	210
971.	Woodward Governor	Rockford, Ill.	210
972.	Allegheny Int'l	Pittsburgh	209
973.	Cyprus Minerals	Englewood, Colo.	209
974.	Conn. Laborers	W. Haven	209
975.	Longshr. Hampton Rds.	Norfolk, Va.	209
976.	Syracuse Op. Eng.	Syracuse, N.Y.	209
977.	Amer. Cast Iron Pipe	Birmingham, Ala.	208
978.	Amsted Indus.	Chicago	208
979.	A.B. Dick	Chicago	208
980.	Inland Container	Indianapolis	208
981.	Retail/Wholesale Locals	Birmingham, Ala.	208
982.	U.S. Borax & Chem.	Los Angeles	208
983.	Weirton Steel	Weirton, W. Va.	208
984.	Castle & Cooke	Los Angeles	207
985.	Credit Union Nat'l	Madison, Wis.	207
986.	Diversified Energies	Minneapolis	207
987.	United Dominion	Charlotte, N.C.	207
988.	Young & Rubicam	New York	207
989.	Acme Steel	Riverdale, Ill.	206
990.	Anchorage Municipality	Anchor., Alaska	206
991.	GAB Business Services	Parsippany, N.J.	206
992.	Holiday	Memphis, Tenn.	206
993.	Philadelphia Iron Wkrs.	Philadelphia	206
994.	Nucor	Charlotte, N.C.	206
995.	ADT Security Systems	Parsippany, N.J.	205
996.	Longview Fibre	Longview, Wash.	205
997.	YWCA	New York	205
998.	Amer. Medical Int'l	Beverly Hills	204
999.	Hawaii Carpenters	Honolulu	204
1000.	Macomb County	Mt. Clem., Mich.	204
	Total		**488,291**

On the following pages, *Pensions & Investments* presents sketches of the 200 largest pension funds in the United States. The profiles include each fund's asset allocation, investment managers and key personnel.

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A

Abbott Laboratories

	($ millions)
Total assets	2,210
Defined benefit	899
401(k)	1,311
Employer DB contributions	0
Benefit payments	30
Employer DC contributions	23
Defined benefit asset mix:	
Stocks	45%
Fixed income	55%
Defined contribution asset mix:	
Company stock	90%
GICs/BICs	10%

ABBOTT PARK, Ill. — As of Sept. 30, Abbott Laboratories' total employee benefit assets increased 14.9% to $2.21 billion from $1.923 billion a year earlier. Defined benefit assets decreased 0.6% during the same period, to $899 million from $904 million. Defined contribution assets increased 28.7%, to $1.311 billion from $1.019 billion.

Equity managers: Domestic — Hagler, Mastrovita & Hewitt; Jennison; Leylegian; RCM Capital; and Sirach Capital.

Fixed-income manager: Domestic — RCM.

The master trustee is Continental Bank.

The key person overseeing the investment management of the fund is A.G. Olsen, director.

Aetna Life & Casualty Co.

	($ millions)
Total assets	2,758
Defined benefit	1,775
Total defined contribution	983
Profit-sharing	962
Other	21
Employer DB contributions	0
Benefit payments	54
Employer DC contributions	80
Internally managed assets:	
Total DB	1,775
Total DC	983
Defined benefit asset mix:	
Stocks	62.7%
Fixed income	7.3%
Cash equivalents	0.8%
Real estate equity	5.4%
Mortgages	1.2%
Other	22.6%
Defined contribution asset mix:	
Company stock	20%
Other stock	8%
Fixed income	72%

HARTFORD, Conn. — As of Sept. 30, Aetna Life & Casualty Co.'s total employee benefit assets increased 2% to $2.758 billion from $2.703 billion a year earlier. Defined benefit assets increased 2.6% during the same period, to $1.775 billion from $1.73 billion. Defined contribution assets rose 1%, to $983 million from $973 million.

All of Aetna's assets are managed by Aetna Capital Management.

The master trustee is Connecticut National Bank.

The key person overseeing the investment management of the fund is Kenneth A. Weissman, director.

Retirement Systems of Alabama

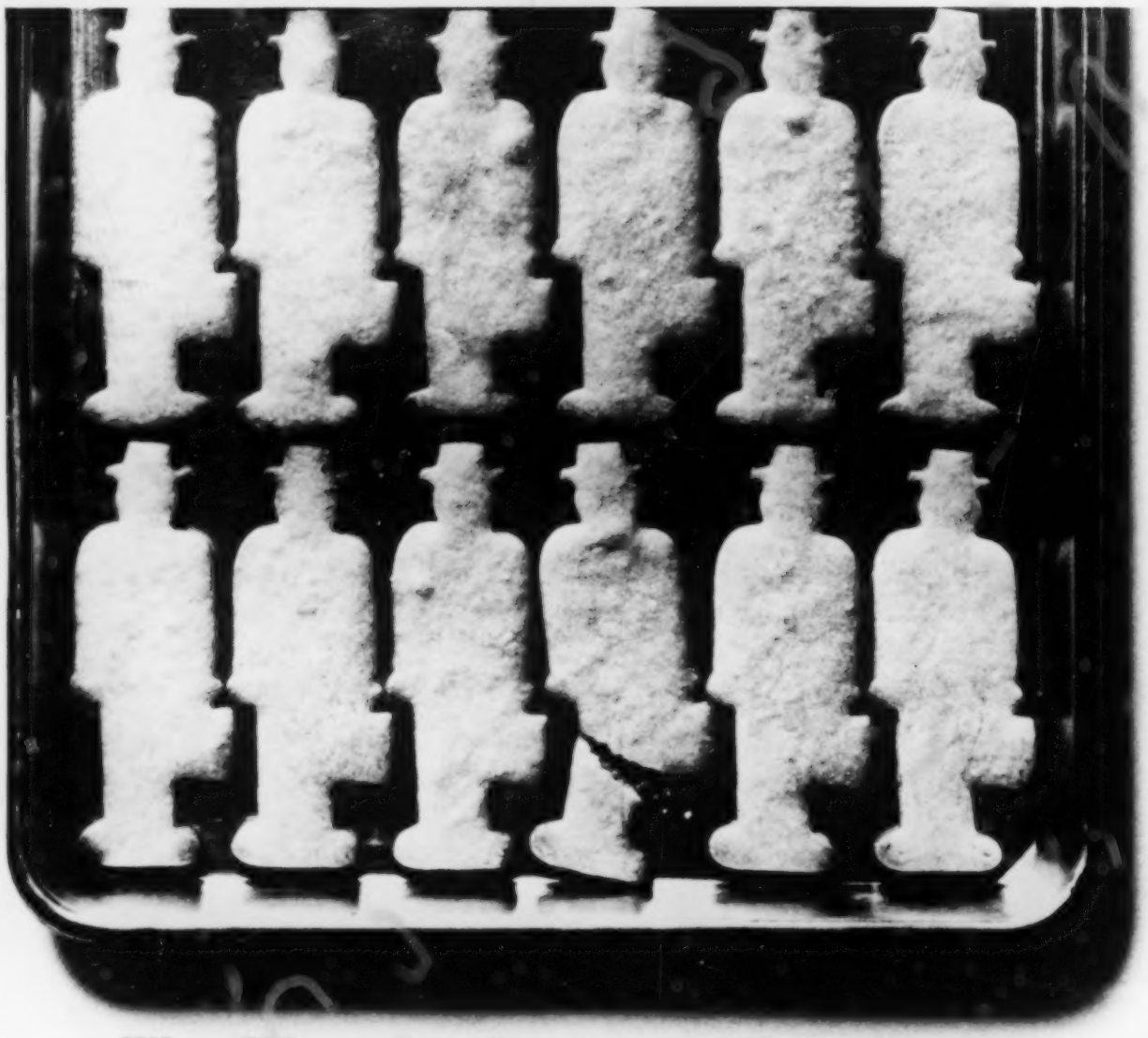
	($ millions)
Total assets*	8,827
Defined benefit	8,827
Employer DB contributions	331
Benefit payments	376
**book value*	
Internally managed assets	8,827
Hedging devices used	
Stock options	
Defined benefit asset mix:	
Stocks	8.7%
Fixed income	52.9%
Cash equivalents	7%
Real estate equity	0.4%
Mortgages	25.5%
Mortgage-backed securities	5.5%

MONTGOMERY, Ala. — As of Sept. 30, the Retirement Systems of Alabama's total employee benefit assets increased 12% to $8.827 billion from $7.884 billion a year earlier. All assets are defined benefit and internally managed.

Key personnel overseeing the investment management of the fund are David G. Bronner, chief executive officer; Hunter Reaves, director of fixed income; and Cheryl Duke, director of equities.

Alaska Retirement Syster

Total assets*	
Defined benefit	



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Marilyn J. Dicks
President & C.E.O.

Irma N. Tavares
Managing Director

Employer DB contributions	na
Benefit payments	na
*as of June 30, 1990	
Internally managed assets	2,470
Defined benefit asset mix:	
Stocks	31.3%
Fixed income	51.7%
Cash equivalents	7.2%
Real estate equity	5.6%
Mortgages	4.2%

JUNEAU, Alaska — As of June 30, the Alaska Retirement Systems' total employee benefit assets increased 7.4% to $4.43 billion from $4.124 billion Sept. 30, 1989. All assets are defined benefit.

Equity managers: Domestic — Fred Alger; IDS; INVESCO; Lehman Ark; Loomis, Sayles; Miller, Anderson & Sherrerd; State Street Bank; United Capital Management.

International — Citibank; J.P. Morgan.

Real estate managers: Aetna; Equitable; John Hancock; JMB; Karsten; J.P. Morgan; Prudential; and Sentinel.

The master custodian is CoreStates; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Hugh Malone, commissioner-revenue; Milt Barker, deputy commissioner; Steven R. Stein, chief investment officer.

Allied-Signal Inc.

	($ millions)
Total assets	5,770
Defined benefit	4,070
Thrift or savings	1,700
Employer DB contributions	67
Benefit payments	260
Employer DC contributions	na
Internally managed assets:	
Total DB	1,140
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	47%
Fixed income	35%
Cash equivalents	6%
Real estate equity	9%
Other	3%
Defined contribution asset mix:	
Company stock	44%
Other stock	11%
GICs/BICs	45%

MORRISTOWN, N.J. — As of Sept. 30, Allied-Signal Inc.'s total employee benefit assets decreased 17.6% to $5.77 billion from $7 billion as of June 30 the previous year. Defined benefit assets decreased 18.6% during the same period, to $4.07 billion from $5 billion. Defined contribution assets decreased 15% to $1.7 billion from $2 billion.

The master trustees are Northern Trust for the defined benefit plan and State Street for the defined contribution plan.

Key personnel overseeing the investment management of the fund are Edward Tokar, vice president-investments; Mark E. Smith, senior portfolio manager; and Jay W. Burden, portfolio manager.

Aluminum Co. of America

	($ millions)
Total assets	3,270
Defined benefit	2,600
401(k)	670
Employer DB contributions	70
Benefit payments	192
Employer DC contributions	20
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	18%
Fixed income	65.5%
Real estate equity	2%
Mortgages	11.5%
Other	3%
Defined contribution asset mix:	
Company stock	23.4%
Other stock	6.1%
GICs/BICs	70.5%

PITTSBURGH — As of Sept. 30, Aluminum Co. of America's total employee benefit assets increased 2.2% to $3.27 billion from $3.2 billion a year earlier. Defined benefit assets decreased 2.3% during the same period, to $2.6 billion from $2.66 billion a year. Defined contribution assets increased 24%, to $670 million from $540 million.

Equity managers: Domestic — Franklin Portfolio; Geewax, Terker; Rosenberg Institutional; State Street Bank; Wells Fargo.

International — Capital Guardian; Mercator Asset Management.

Fixed-income managers: Domestic — Massachusetts Financial; Mellon Bank; Prudential; STW Fixed Income.

International — Massachusetts Financial; Prudential.

Real estate managers: Coldwell Banker; Equitable; John Hancock; RREEF.

The master trustee and global custodian is Mellon Bank.

Key personnel overseeing the investment management of the fund are Joseph Pellegrino, director-pension investments; and Donna S. Borr, [illegible] investment analyst.

Emerging markets: March 4.

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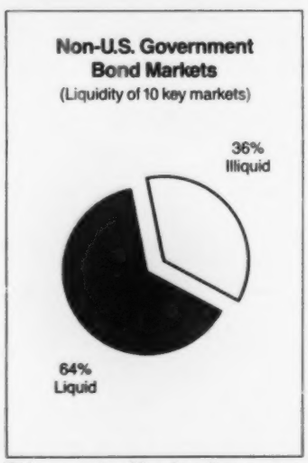

With international bond markets varying widely in liquidity, an investment manager's portfolio can have a very different market exposure from a benchmark that includes illiquids.

JPMorgan

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American Airlines Inc.

	($ millions)
Total assets	5,800
Defined benefit	2,000
Total defined contribution	1,300
401(k)	500
Other	1,300
Employer DB contributions	160
Benefit payments	75
Employer DC contributions	85
Internally managed assets:	
Total DB	100
Defined benefit asset mix:	
Stocks	30%
Fixed income	65%
Cash equivalents	5%
Defined contribution asset mix:	
Other stock	90%
Cash equivalents	10%

DALLAS-FORT WORTH INTERNATIONAL AIRPORT — As of Sept. 30, American Airlines' total employee benefit assets decreased 5% to $3.8 billion from $4 billion a year earlier. Defined benefit assets remained the same at $2 billion . Defined contribution assets decreased 10%, to $1.8 billion from $2 billion.

Equity managers: Domestic — Atlanta Capital; Barrow Hanley; Boatmen's; Capital Guardian; Cashman Farrell; Dewey Square; Dreman; Geoucheau, Stupfel; Hotchkis & Wiley; Independence; NCNB-Texas; Penmark; United Capital.

International — H.D. International; Morgan Grenfell; Morgan Stanley; Rowe Price-Fleming; Templeton.

The master trustee is NCNB-Texas; the global custodian is Chase.

Key personnel overseeing the investment management of the fund are William F. Quinn, president-AMR Investment Services, and Dennis M. O'Hara, vice president, AMR Investment Services.

Top 200 funds by category

Top corporate funds

Fund	($ millions)
AT&T	38,876
General Motors	36,300
General Electric	27,108
IBM	25,000
Ford Motor	20,800
Du Pont	17,728
NYNEX	14,383
BellSouth	14,125
Bell Atlantic	13,943
Ameritech	13,241
Total	**221,504**

Top miscellaneous funds

Fund	($ millions)
TIAA-CREF	83,100
United Nations	8,591
Federal Retirement Thrift	6,890
United Methodist Church	3,459
World Bank	3,171
Tennessee Valley Authority	2,834
Mass. PRIM	2,700
Southern Baptist	2,680
Presbyterian Church	2,300
Episcopal Church	1,850
Total	**117,575**

Top public funds

Fund	($ millions)
California Employees	54,000
New York State & Local	43,737
New York City	40,763
California State Teachers	30,140
New York State Teachers	26,689
New Jersey	26,609
Texas Teachers	23,734
Ohio Employees	20,598
Florida State Board	19,268
Wisconsin State Board	18,482
Total	**304,020**

Top union funds

Fund	($ millions)
Teamsters, Central States	9,398
Teamsters, Western	9,292
UMWA	4,759
Nat'l Electrical Contractors	3,692
Boilermaker/Blacksmith	2,395
Operating Engineers	2,114
S. California UFCW	2,073
Bakery & Confectionery	2,070
Hospital/Health Care	1,932
Sheet Metal Workers	1,686
Total	**39,411**

American Electric Power Service Corp.

	($ millions)
Total assets	1,842
Defined benefit	1,205
Total defined contribution	637
Thrift or savings	624
ESOP	13
Employer DB contributions	9
Benefit payments	58
Employer DC contributions	16
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	60%
Fixed income	22%
Cash equivalents	13%
Real estate equity	1%
Other	4%
Defined contribution asset mix:	
Company stock	35%
Other stock	10%
GICs/BICs	55%

COLUMBUS, Ohio — As of Sept. 30, American Electric Power Service Corp.'s total employee benefit assets increased almost 3% to $1.842 billion from $1.789 billion a year earlier. Defined benefit assets decreased 4.4% during the same period, to $1.205 billion from $1.26 billion. Defined contribution assets increased 20.4%, to $637 million from $529 million.

The master trustees are Ameritrust and Bank of New York.

Key personnel overseeing the investment management of the fund are Gerald P. Maloney, senior vice president-finance, and Joseph H. Shepard Jr., manager-corporate benefit fund.

American Information Technologies Inc.

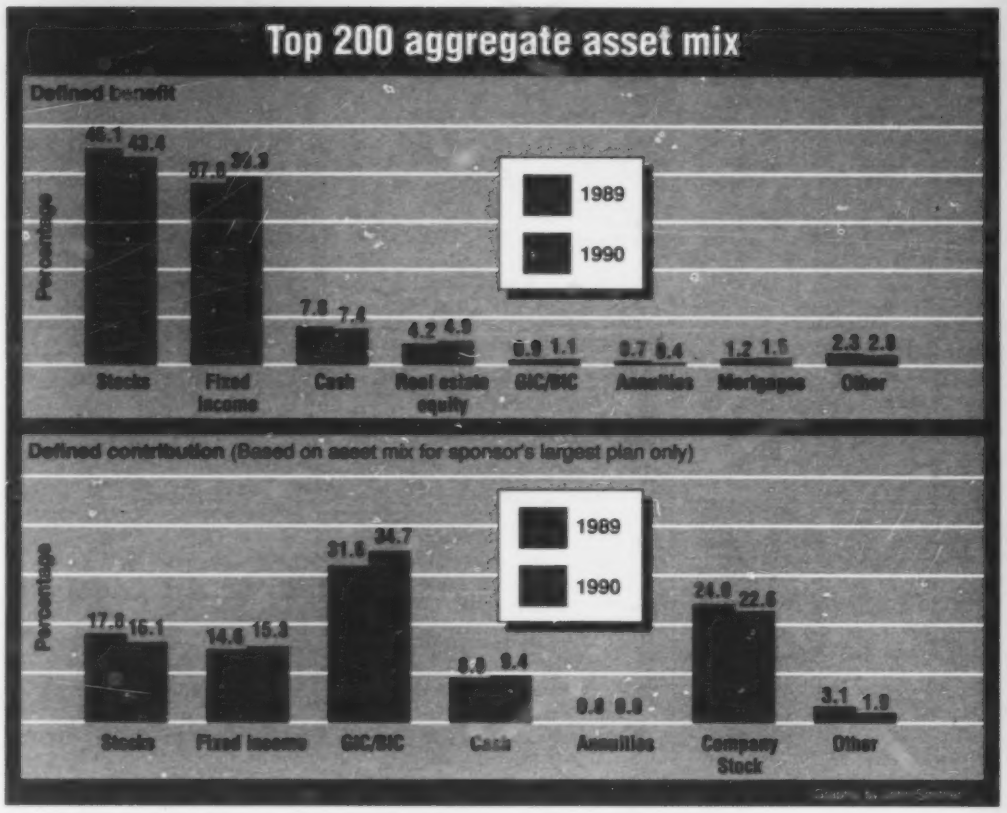
	($ millions)
Total assets	13,241
Defined benefit	11,000
401(k)	2,241
Employer DB contributions	0
Benefit payments	548
Employer DC contributions	7
Internally managed assets:	
Total DB	2,981
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Defined benefit asset mix:	
Stocks	49%
Fixed income	34%
Cash equivalents	2%
Real estate equity	12%
Venture capital	3%
Defined contribution asset mix:	
Company stock	46%
Other stock	18%
Fixed income	3%
GICs/BICs	33%

CHICAGO — As of Sept. 30, American Information Technologies Corp.'s total employee benefit assets decreased 7.4% to $13.241 billion from $14.3 billion a year earlier. Defined benefit assets decreased 9.1% during the same period, to $11 billion from $12.1 billion. Defined contribution assets increased 1.9%, to $2.241 billion from $2.2 billion.

Managers: Ameritrust; Bankers Trust; Baring International; Brinson Partners; Capital Guardian Trust; Concord Capital; David J. Greene; Delaware Investment Advisors; First Wisconsin Asset; First Wisconsin Trust; Goldman Sachs Asset; Harris Derivative; Henry Kaufman; Hyperion Capital; IDS International; INVESCO; Jennison Associates; Lincoln Capital; Loomis, Sayles; Lord, Abbett; NISA; Neuberger & Berman; RCM Capital; Sit Investment; Travelers.

The master trustee and global custodian is Harris Trust & Savings Bank; *the investment consultant is Callan Associates.*

Judith W. Mares, chief investment officer, is the key person overseeing the fund.



American Stores Co.

	($ millions)
Total assets	1,854
Defined benefit	53
Profit-sharing	1,801
Employer DB contributions	68
Benefit payments	175
Employer DC contributions	70
Hedging devices used:	
Stock options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	8.4%
Fixed income	66.5%
Cash equivalents	2.4%
Annuities	5.9%
Mortgage-backed securities	16.8%
Defined contribution asset mix:	
Company stock	5.1%
Other stock	39.1%
Fixed income	39.5%
Cash equivalents	5%
Mortgage-backed securities	5.6%
Participant loans	1.4%
Real estate securities	4.3%

SALT LAKE CITY — As of Sept. 30, American Stores Co.'s total employee benefit assets decreased 1.5% to $1.854 billion from $1.882 billion a year earlier. Defined benefit assets increased 6% during the same period, to $53 million from $50 million. Defined contribution assets decreased 1.7%, to $1.8 billion from $1.832 billion.

Equity managers: Domestic — Institutional Capital; Lazard Freres; Neuberger & Berman; PIMCO; RCM; Fayez Sarofim; Templeton; and Wells Fargo.

International — Baring; Institutional Capital; Lazard Freres; Nomura; Rowe-Price Fleming International; Fayez Sarofim; and Templeton.

Fixed-income managers: Domestic — Institutional Capital; Lazard Freres; Neuberger & Berman; PIMCO; Templeton; and Western Asset.

International — Baring; Rowe-Price Fleming; and Templeton.

Real estate managers: Coldwell Banker; Hancock; LaSalle; and RREEF.

The master trustee and global custodian is Bankers Trust; the investment consultant is Evaluation Associates.

Key personnel overseeing the investment management of the fund are Scott Bergeson, senior vice president-benefits administration, and Duane Whitney, controller-benefits.

American Telephone & Telegraph Co.

	($ millions)
Total assets	38,876
Defined benefit	30,777
Total defined contribution	8,099
Thrift or savings	7,224
ESOP	481
Other	394
Employer DB contributions	416
Benefit payments	1,241
Employer DC contributions	329
Internally managed assets:	
Total DB	2,504
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	53%
Fixed income	28%
Real estate equity	14%
Other	5%
Defined contribution asset mix:	
Company stock	42%
Other stock	10%
Fixed income	8%
GICs/BICs	40%

BERKELEY HEIGHTS, N.J. — As of Sept. 30, American Telephone & Telegraph Co.'s total employee benefit assets decreased 9% to $38.876 billion from $42.7 billion a year earlier. Defined benefit assets decreased 8% during the same period, to $30.777 billion from $33.376 billion. Defined contribution assets decreased 13%, to $8.099 billion from $9.324 billion.

Managers: Abbott Capital; Aldrich, Eastman & Waltch; Coldwell Banker; Corporate Property Investors; JMB Realty; O'Connor Management; Bankers Trust; Batterymarch; Boston Co. Real Estate; Brown Brothers Harriman; Butler Capital; Capital Guardian; Chase Investors; Chancellor Trust; Chemical Bank; Copley; Denver Investment; Dusco; Eastdil; Equitable Life; Fidelity International; First National Bank of Atlanta; First Reserve Energy Advisors; Goldman, Sachs; GT Capital; Heitman Financial; INVESCO; Investment Counselors of Maryland; Ivory & Sime; Jennison; John Hancock; Karsten; Lincoln Capital; Loomis, Sayles; Lord, Abbett; Mitchell, Hutchins; Mellon Bank; Morgan Grenfell; J.P. Morgan; NCNB-Texas; PIMCO; Prudential Asset; Rosenberg Real Estate; RCM Capital; Standish, Ayer & Wood; State Street Bank; State Street Research; United Capital; Warburg, Pincus; Wellington Management; and Western Asset.

The trustees are Bankers Trust, Chase Manhattan, Citibank, Mellon, Northern Trust and State Street Bank; the global custodian is Chase Manhattan; the investment consultant is Frank Russell Co.

Key personnal overseeing the investment management of the fund are David P. Feldman, corporate vice president-investment management, and Robert E. Angelica, investment vice president.

Amoco Corp.

	($ millions)
Total assets	4,665
Defined benefit	2,165
Defined contribution	2,500
Employer DB contributions	0
Benefit payments	200
Employer DC contributions	57
Hedging devices used:	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	70%
Fixed income	16%
Cash equivalents	4%
Real estate equity	5%
Other	5%

CHICAGO — As of Sept. 30, Amoco Corp.'s total employee benefit assets increased 1.8% to $4.665 billion from $4.581 billion a year earlier. Defined benefit assets decreased 16.4% during the same period, to $2.165 billion from $2.59 billion. Defined contribution assets increased 25.5%, to $2.5 billion from $1.991 billion.

Equity managers: Domestic — Chase Investors; Dimensional; Forstmann-Leff; Franklin Portfolio; Fayez Sarofim; State Street Research.

International — Acadian; Boston International; State Street Bank.

Fixed-income managers: Domestic — Fischer, Francis, Trees & Watts; PIMCO; Security Capital.

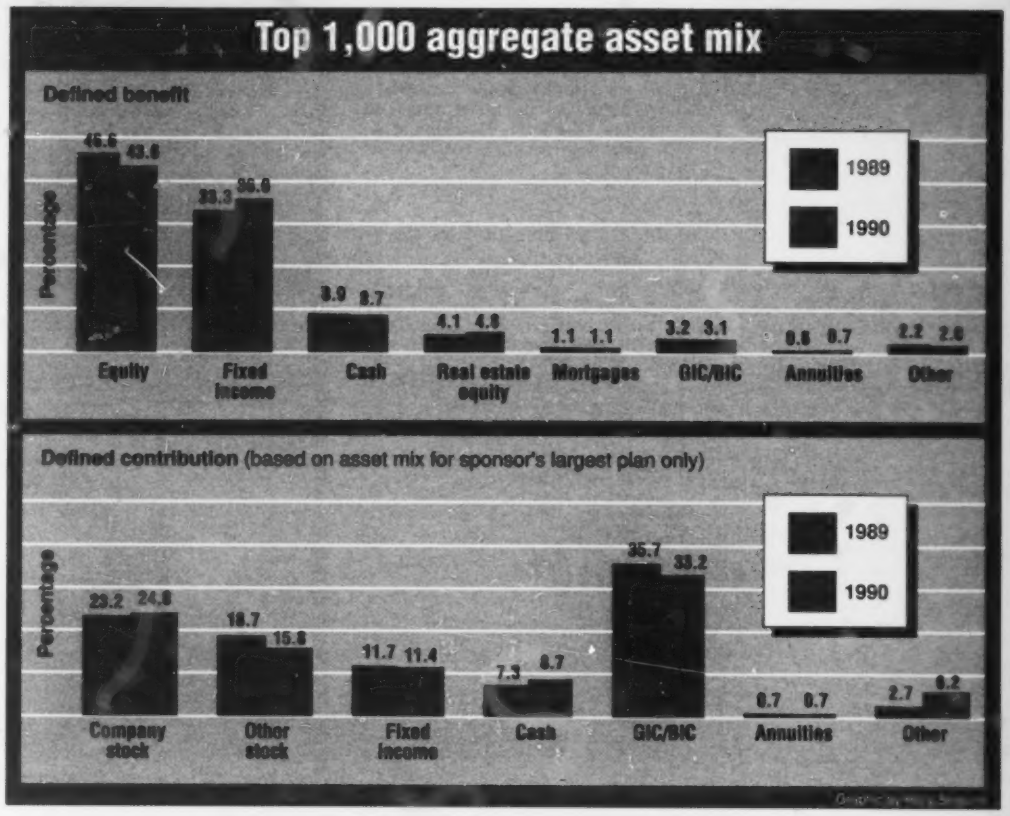
Real estate manager: Equitable.

The master trustee and global custodian is Chase Manhattan.

Key personnel overseeing the investment management of the fund are Marvin L. Damsma, director-pension administration, and John S. Ruey, administrative manager-investments.

Anheuser-Busch Cos. Inc.

	($ millions)
Total assets	1,986
Defined benefit	952
Total defined contribution	1,034
401(k)/ESOP	960
Other	74
Employer DB contributions	26
Benefit payments	na
Employer DC contributions	35
Defined benefit asset mix:	
Stocks	45%
Fixed income	43%
Cash equivalents	2%
Real estate equity	5%
GICs/BICs	5%
Defined contribution asset mix:	
Company stock	92%
Other stock	2%
Cash equivalents	2%
GICs/BICs	4%



ST. LOUIS — As of Sept. 30, Anheuser-Busch Cos. Inc.'s total employee benefit assets increased 18.9% to $1.986 billion from $1.67 billion a year earlier. Defined benefit assets decreased 4.3% during the same period, to $952 million from $995 million. Defined contribution assets increased 53.2%, to $1.034 billion from $675 million.

Equity managers: Domestic — Boatmen's; Dalton; Independence; Mellon Capital; Frank Russell; and Vanguard.

Fixed-income managers: Domestic — Boatmen's; Equitable Capital; General American; Independence; Mellon Capital; J.P. Morgan; and Frank Russell.

Real estate managers: Aetna; Equitable; JMB; and LaSalle.

The master trustee is Boatmen's.

Key personnel overseeing the investment management of the fund are Jerry Ritter, vice president-group executive; Gerald Thayer, vice president-treasurer; David C. Sauerhoff, manager-corporate pension investments.

Arizona State Retirement System

	($ millions)
Total assets	7,234
Defined benefit	7,234
Employer DB contributions	64
Benefit payments	292
Defined benefit asset mix:	
Stocks	39%
Fixed income	47%
Cash equivalents	10.6%
Mortgages	3.4%

PHOENIX, Ariz. — As of Sept. 30, the Arizona State Retirement System's total employee benefit assets decreased 5% to $7.234 billion from $7.612 billion a year earlier. All assets are in defined benefit plans.

Equity managers: Domestic — Boston Co.; IDS; INVESCO; J.P. Morgan; and Wells Fargo.

International — State Street Bank and Warburg.

Fixed-income managers: Domestic — Boston Co.; Duff & Phelps; IDS; INVESCO; J.P. Morgan; and Wells Fargo.

Real estate manager: Valley National Bank.

The master custodian is Mellon Bank; the global custodians are Mellon Bank and State Street Bank; the investment consultant is Mercer.

The key person overseeing the investment management of the fund is Douglas Lemon, assistant director.

Arkansas Teacher Retirement System

	($ millions)
Total assets	2,216
Defined benefit	2,216
Employer DB contributions	87
Benefit payments	92
Internally managed assets	283
Defined benefit asset mix:	
Stocks	35.4%
Fixed income	48.5%
Cash equivalents	12.9%
Mortgages	3.2%

LITTLE ROCK, Ark. — As of Sept. 30, the Arkansas Teacher Retirement System's total employee benefit assets increased 2.3% to $2.216 billion from $2.166 billion as of Aug. 31, 1989. All the assets are in defined benefit plans.

Equity managers: Domestic — Oppenheimer.

Fixed-income managers: Domestic — Commercial Capital.

The master custodian is First Commercial Bank; the investment consultant is Shearson Lehman Brothers.

Key personnel overseeing the investment management of the fund are Bill A. Shirron, executive director, and Mavolene C. Booth, associate director-investments.

Armco Inc.

	($ millions)
Total assets	1,995
Defined benefit	1,798
Total defined contribution	197
Thrift or savings	191
401(k)	6
Employer DB contributions	120
Benefit payments	177
Employer DC contributions	9
Internally managed assets:	
Total DB	741
Defined benefit asset mix:	
Stocks	43.3%
Fixed income	41.6%
Cash equivalents	5.7%
Real estate equity	0.1%
GICs/BICs	0.6%
Venture capital	0.3%
Cash receivable	2.4%
Defined contribution asset mix:	
Company stock	20%
Other stock	8%
GICs/BICs	72%

PARSIPPANY, N.J. — As of Sept. 30, Armco Inc.'s total employee benefit assets decreased 7.5% to $1.995 billion from $2.156 billion a year earlier. Defined benefit assets decreased 6.2% during the same period, to $1.798 billion from $1.917 billion. Defined contribution assets decreased 17.6%, to $197 million from $239 million.

Equity managers: Domestic — Alliance; Capital Guardian; Columbus Circle; Lincoln Capital; Mellon Capital; and Miller, Anderson & Sherrerd.

International — Capital Guardian and Oechsle.

Real estate manager: RREEF.

Other managers: Allsop; Brentwood; Concord Partners; DSV; Equitable; John Hancock; and North American Private Equity.

The master trustee and global custodian is Chase Manhattan; the investment consultant is SEI.

The key person overseeing the investment management of the fund is Dennis F. Furey, general manager-pension investments.

Atlantic Richfield Co.

	($ millions)
Total assets	3,575
Defined benefit	2,110
Total defined contribution	1,465
Thrift or savings	583
401(k)	882
Employer DB contributions	6
Benefit payments	156
Employer DC contributions	68
Internally managed assets:	
Total DB	1,367
Total DC	11
Defined benefit asset mix:	
Stocks	43%
Fixed income	25%
Cash equivalents	19%
Real estate equity	8%
Mortgages	1%
GICs/BICs	1%
Other	3%
Defined contribution asset mix:	
Company stock	74%
Other stock	3%
Fixed income	1%
Cash equivalents	22%

LOS ANGELES — As of Sept. 30, Atlantic Richfield Co.'s total employee benefit assets increased 1% to $3.575 billion from $3.541 billion a year earlier. Defined benefit assets decreased 11.6% during the same period, to $2.11 billion from $2.388 billion. Defined contribution assets increased 27%, to $1.465 billion from $1.153 billion.

Equity managers: Domestic — GAMCO; Pacific Financial Research; W.H. Reaves; and Donald Smith & Co.

International — Capital Guardian Trust; Capital International; Emerging Markets Investors; G.T. Capital; Rowe Price-Fleming; and TCW.

Fixed-income managers: Domestic — Cypress Capital; MacKay-Shields; J.P. Morgan; and Weiss, Peck & Greer.

International — Baring International.

Real estate managers: Aldrich, Eastman & Waltch; Lehndorff Management; and Metric Institutional Realty.

Cash equivalent managers: Payden & Rygel and Security Pacific.

The master trustee and global custodian is State Street Bank; the investment consultant is Collins Associates.

Key personnel overseeing the investment management of the fund are E. Kent Damon Jr., senior vice president and Rene T. Coupillaud, controller.

Top defined benefit plans

Fund	($ millions)
California Employees	54,000
New York State & Local	43,737
New York City	40,763
AT&T	30,777
General Motors	30,700
California Teachers	30,140
New York State Teachers	26,689
New Jersey	26,335
Texas Teachers	23,734
General Electric	22,474
Total	**329,349**

Top defined contribution plans

Fund	($ millions)
TIAA-CREF	83,100
AT&T	8,099
Federal Retirement Thrift	6,890
Du Pont	6,280
Procter & Gamble	5,857
General Motors	5,600
Boeing	5,200
Sears, Roebuck	4,684
General Electric	4,634
Exxon	4,612
Total	**134,956**

B

Bakery & Confectionery Union & Industry International Pension Fund

	($ millions)
Total assets	2,070
Defined benefit	2,070
Employer DB contributions	156
Benefit payments	153
Internally managed assets:	
Total DB	145
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	39%
Fixed income	42.1%
Cash equivalents	9.1%
Mortgages	8.8%
GICs/BICs	1%

KENSINGTON, Md. — As of Sept. 30, the Bakery & Confectionery Union & Industry International Pension Fund's total employee benefit assets decreased 4.8% to $2.07 billion from $2.175 billion a year earlier. All of the assets are defined benefit.

Balanced managers: Lazard Freres; Loomis, Sayles; Mitchell Hutchins; Stein, Roe; Trust Co. of the West; and Wertheim.

Equity managers: Domestic — Eagle.

International — Mu-Cana and Royal Trust.

Fixed-income managers: Domestic — Amalgamated; Bridgewater; and Prudential.

International — Mu-Cana and Royal Trust.

Real estate managers: AFL-CIO Housing Investment Trust/Building Investment Trust.

The master custodian for U.S. securities is Mercantile Safe Deposit; the master custodian for Canadian securities is Royal Trust.

Key personnel overseeing the investment management of the fund are John J. Fleming, administrative director; and Richard Swift, director of investments.

Bechtel Power Corp.

	($ millions)
Total assets	1,618
Total defined contribution	1,618
Profit-sharing	478
401(k)	1,140
Employer contributions	na
Internally managed assets	517
Hedging devices used:	
Stock options	
Stock index futures	
Fixed-income futures	
Defined contribution asset mix:	
Domestic stock	31%
Fixed income	27%
Cash equivalents	8%
GICs/BICs	1%
Real estate equity	6%
Non-U.S. stocks	16%
Non-U.S. fixed income	11%

SAN FRANCISCO — As of Sept. 30, Bechtel Power Corp.'s total employee benefit assets decreased 2.2% to $1.618 billion from $1.655 billion a year earlier. All are defined contribution assets.

Equity managers: Domestic — BEA; Columbia Management; Dodge & Cox; Fremont; Morgan Grenfell; Sit Investment; Wellington.

International — Acadian; Boston International; J.P. Morgan; Wells Fargo Nikko.

Fixed-income managers: Domestic — Columbia Management; Fremont; PIMCO.

International — J.P. Morgan and Wells Fargo Nikko.

Real estate managers: Aetna; Cabot, Cabot and Forbes; Corporate Property Investors; Prudential; RREEF.

Tactical asset allocation managers: Bailard, Biehl and Kaiser; Matrix; Quantilogic.

The master trustee and global custodian is Bankers Trust; the investment consultant is Fremont Investment.

Key personnel overseeing the investment management of the fund are David Redo and Vincent P. Kuhn Jr., investment managers.

Bell Atlantic Corp.

	($ millions)
Total assets*	13,943
Defined benefit	11,123
Total defined contribution	2,820
Thrift or savings	113
401(k)	2,453
ESOP	254

*P&I estimate

PHILADELPHIA — As of Sept. 30, Bell Atlantic Corp.'s employee benefit assets totaled $13.943 billion according to *P&I* estimates. The estimate is based on $14.113 billion the company reported as of Dec. 31, 1989. That amounts to an estimated 2.3% increase from the $13.635 billion *P&I* estimated a year earlier. Defined benefit assets were estimated to have decreased 3.7% to $11.123 billion, while defined contribution assets were estimated to have increased 35.2% to $2.82 billion from $2.085 during the same period.

The master trustee of the pension trust is Mellon Bank; other trustees/custodians are Bankers Trust and Midlantic National Bank; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Joseph A. Bobrowski, executive director-trust administration; and Edward P. Rennie, executive director-trust investments.

BellSouth Corp.

	($ millions)
Total assets*	14,152

*as of June 30, 1990

ATLANTA — As of June 30, BellSouth Corp.'s total employee benefit assets increased 10.2% to $14.152 billion from $12.843 billion as of Sept. 30, 1989.

The key person overseeing the investment management of the fund is Kincaid Patterson, managing director-trust asset management.

Bethlehem Steel Corp.

	($ millions)
Total assets	3,080
Defined benefit	3,080
Employer DB contributions	337
Benefit payments	462
Internally managed assets	3,055
Defined benefit asset mix:	
Stocks	30%
Fixed income	63%
Cash equivalents	7%

BETHLEHEM, Pa. — As of Sept. 30, Bethlehem Steel Corp.'s total employee benefit assets decreased 2.4% to $3.08 billion from $3.155 billion a year earlier. All assets are defined benefit.

Equity managers: International — Putnam and J.P. Morgan.

The master trustee is Bankers Trust.

The key person overseeing the investment management of the fund is J. Gerard Mead, manager-pension fund.

Boeing Co.

	($ millions)
Total assets	11,600
Defined benefit	6,400
Defined contribution	5,200

SEATTLE — As of Sept. 30, the Boeing Co.'s total employee benefit assets increased 5.4% to $11.6 billion from the $11.001 billion *Pensions & Investments* estimated the company had a year earlier. Defined benefit assets decreased 5.8% during the same period, to $6.4 billion from an estimated $6.791 billion. Defined contribution assets increased 23.5%, to $5.2 billion from an estimated $4.21 billion.

Board of Trustees, Boilermaker-Blacksmith National Pension Trust

	($ millions)
Total assets	2,395
Defined benefit	2,395
Employer DB contributions	62
Benefit payments	107
Defined benefit asset mix:	
Stocks	40%
Fixed income	36%
Cash equivalents	8%
Real estate equity	11%
GICs/BICs	1%
Other	4%

KANSAS CITY, Kan. — As of Sept. 30, the Board of Trustees, Boilermaker-Blacksmith National Pension Trust's total employee benefit assets increased 12.3% to $2.395 billion from $2.132 billion as of June 30, 1989. All assets are defined benefit.

Equity managers: Domestic — Atalanta/Sosnoff; Carl Domino; Duff & Phelps; Fiduciary Management Associates; Lazard Freres; Neuberger & Berman; and Shields Asset.

Fixed-income managers: Domestic — Columbia Management; Duff & Phelps; Financial Counselors; Lehman Ark; Loomis-Sayles; and Scudder, Stevens & Clark.

Balanced managers: McMorgan and TCW.

Real estate managers: Equitable Real Estate; Karsten; J.P. Morgan; The New England; and Prudential.

The investment consultant is Callan.

Key personnel overseeing the investment management of the fund are V. Keith Reed, executive administrator, and David E. Hanson, financial director.

BP America Inc.

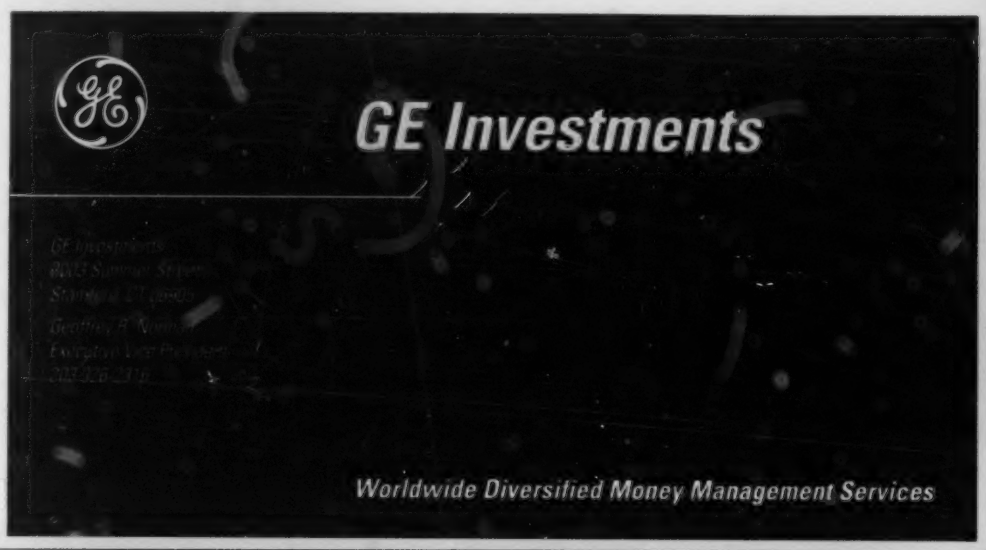
	($ millions)
Total assets	2,235
Defined benefit	1,274
401(k)	961
Employer DB contributions	58
Benefit payments	95
Employer DC contributions	78
Internally managed assets:	
Total DB	588
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	61.4%
Fixed income	23.7%
Cash equivalents	3.5%
Real estate equity	8.7%
Venture capital	2.7%
Defined contribution asset mix:	
Company stock	6.3%
Other stock	17.5%
Fixed income	0.4%
Cash equivalents	0.4%
GICs/BICs	75.4%

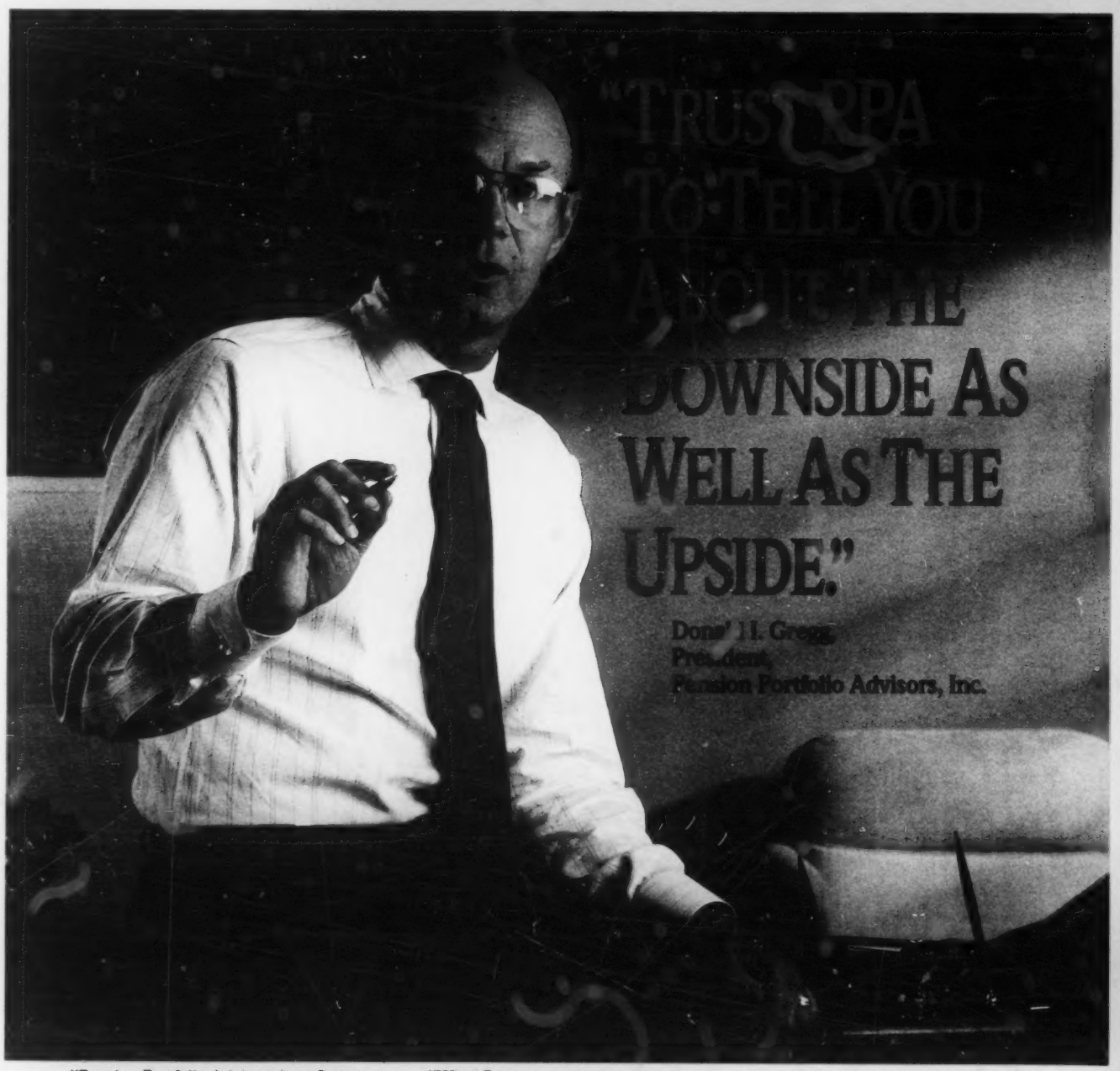
CLEVELAND — As of Sept. 30, BP America Inc.'s total employee benefit assets increased 0.7% to $2.235 billion from $2.218 billion a year earlier. Defined benefit assets decreased 8% during the same period, to $1.274 billion from $1.385 billion. Defined contribution assets increased 15.4% to $961 million from $833 million.

Equity managers: Domestic — Alliance Capital; Hotchkis & Wiley; Mellon Capital; United Capital; Value Line.

International — Baring International; Boston International Advisors; J.P. Morgan.

Fixed-income managers: Domestic — J.P. Morgan; Mellon Capital.





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Real estate managers: TCW.

The master trustees are Bankers Trust and National City Bank; the global custodian is Bankers Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Rodney F. Chase, executive vice president-finance and chief financial officer, and Howard W. Harpster, director-pension investments.

C

California Public Employees' Retirement System

	($ millions)
Total assets	54,000
Defined benefit	54,000
Employer DB contributions	1,892
Benefit payments	na
Internally managed assets	48,400
Defined benefit asset mix	
Stocks	39.83%
Fixed income	39.79%
Cash equivalents	5.24%
Real estate equity	9.47%
Mortgages	5.62%
Other	0.05%

SACRAMENTO — As of Sept. 30, the California Public Employees' Retirement System's total employee benefit assets, at $54 billion, were unchanged from a year earlier. All assets are defined benefit.

Equity managers: Domestic — Boston Co.; Dimensional; Oppenheimer Capital; RCM; Roll & Ross; State Street Bank; TCW.

International — Brinson; County NatWest; Fiduciary Trust; Morgan Grenfell; Nomura Capital; Oechsle; Schroder Capital; State Street Bank; TCW Global.

Fixed-income managers: International — Baring; Fidelity; Warburg.

Real estate managers: Equitable; FIA; Heitman; LaSalle; TCW Realty.

The master custodian and global custodian is Boston Safe Deposit; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are DeWitt Bowman, chief investment officer; and Dale Hanson; chief executive officer.

California State Teachers' Retirement System

	($ millions)
Total assets	30,140
Defined benefit	30,140
Employer DB contributions	901
Benefit payments	1,598
Internally managed assets	17,942
Hedging devices used	
Stock index futures	
Defined benefit asset mix	
Stocks	36.9%
Fixed income	48.7%
Cash equivalents	6.8%
Real estate equity	5.1%
Mortgages	2.1%
Other	0.4%

SACRAMENTO, Calif. — As of Sept. 30, the California State Teachers' Retirement System total employee benefit assets decreased 0.6% to $30.14 billion from $30.335 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Barrow, Hanley; Denver Investment; Pilgrim, Baxter; Provident Investment; TCW Asset; Wells Fargo Nikko; Wright Investors.

Real estate managers: Equitable Real Estate; Lehndorff & Babson; TCW Realty.

Alternative investment managers: Abbott.

The master custodian is State Street Bank; the investment consultants are Pension Consulting Alliance and Institutional Property Consultant.

Key personnel overseeing the investment management of the fund are Thomas Flanigan, chief investment officer; James Mosman, chief executive officer; and Sandra Parker, deputy chief executive officer.

Top 200 funds with defined benefit assets managed internally

($ millions)

Fund	Total	Equities	Bonds	Short-term	Real estate	Foreign stocks	Foreign bonds	Foreign cash	Other
California Employees	48,400	17,700	11,800	1,600	5,100	0	2,000	0	10,200
New York State & Local	36,745	13,914	18,928	1,316	0	0	0	0	2,587
New Jersey	26,335	12,725	12,634	976	0	0	0	0	0
New York State Teachers	24,527	13,019	9,198	642	20	0	0	0	1,648
Texas Teachers	23,734	9,431	11,400	200	2,324	397	0	0	0
General Electric	20,404	8,165	6,340	1,196	2,145	767	46	0	1,745
Ohio Employees	19,620	3,373	10,801	5,446	0	0	0	0	0
Ohio State Teachers	18,200	5,200	9,600	1,200	2,200	0	0	0	0
California State Teachers	17,942	0	15,310	2,632	0	0	0	0	0
Wisconsin State Board	17,790	8,812	6,749	1,217	692	154	166	0	0
State of Michigan	16,345	6,308	5,327	2,668	913	0	0	0	1,129
North Carolina	11,905	0	11,853	52	0	0	0	0	0
Florida State Board	11,778	4,599	6,200	947	32	0	0	0	0
IBM	11,600	na	na	na	na	na	na	na	na
Du Pont	11,267	5,826	3,746	1,352	0	309	34	0	0
University of California	11,216	8,755	2,154	101	0	35	171	0	0
Alabama Retirement	8,827	770	4,667	616	35	0	0	0	2,739
United Nations	8,591	1,427	1,372	236	748	1,792	2,169	607	240
USX	8,380	4,190	2,510	1,060	230	190	140	0	60
Tennessee Consolidated	8,148	2,531	4,505	428	0	410	274	0	0
Colorado Employees	7,873	2,882	3,551	445	542	0	0	0	453
South Carolina	7,728	0	7,487	241	0	0	0	0	0
Maryland State	7,457	844	6,324	289	0	0	0	0	0
Washington State Board	6,803	0	4,556	1,023	1,224	0	0	0	0
Texas Employees	6,242	1,599	4,582	61	0	0	0	0	0
Georgia Teachers	5,992	0	5,482	508	2	0	0	0	0
Minnesota State Board	5,278	402	4,670	206	0	0	0	0	0
Prudential Insurance	4,297	1,260	909	836	552	386	319	0	35
Bethlehem Steel	3,055	885	1,930	230	0	0	0	0	10
Oregon Employes	3,000	0	2,500	0	0	0	0	0	500
Ameritech	2,981	864	120	626	1,369	0	0	0	0
General Dynamics	2,641	445	2,011	0	0	0	0	0	185
GTE	2,623	896	1,723	0	0	4	0	0	0
AT&T	2,504	0	0	0	1,477	0	0	0	1,027
Alaska State	2,470	0	2,290	0	0	0	0	0	180
Metropolitan Life	2,403	na	na	na	na	na	na	na	na
Utah State	2,250	690	1,475	0	85	0	0	0	0
Sears, Roebuck	2,048	1,125	720	116	0	0	0	0	87
New Mexico Educational	1,990	265	1,600	83	0	22	0	0	0
Grumman	1,977	747	699	531	0	0	0	0	0
San Francisco City/County	1,950	574	1,376	0	0	0	0	0	0
Ohio Police & Firemen	1,940	0	1,788	152	0	0	0	0	0
Union Carbide	1,912	393	1,045	265	80	0	14	0	135
Textron	1,845	na	na	na	na	na	na	na	na
Aetna	1,775	1,037	131	10	96	77	0	0	424
Ohio School Employees	1,752	201	1,212	162	177	0	0	0	0
Deere	1,645	1,149	464	32	0	0	0	0	0
NYNEX	1,555	849	706	0	0	0	0	0	0
Kentucky Retirement	1,501	835	50	616	0	0	0	0	0
Atlantic Richfield	1,367	746	273	62	21	199	0	0	66
Travelers	1,363	425	137	7	65	157	26	0	546
Westinghouse Electric	1,349	778	571	0	0	0	0	0	0
Ford Motor	1,300	0	1,300	0	0	0	0	0	0
Commonwealth Edison	1,186	50	939	176	0	21	0	0	0
Chrysler	1,185	694	491	0	0	0	0	0	0
Connecticut Trust Funds	1,165	19	909	237	0	0	0	0	0
Allied-Signal	1,140	430	650	60	0	0	0	0	0
Illinois State Board	1,120	110	1,010	0	0	0	0	0	0
CIGNA	1,106	437	452	5	90	91	31	0	0
Pennsylvania School	1,100	350	750	0	0	0	0	0	0
Virginia Retirement	1,002	719	0	262	21	0	0	0	0
Martin Marietta	967	207	190	570	0	0	0	0	0
New York City	953	0	57	896	0	0	0	0	0
Equitable Life	895	184	578	12	84	37	0	0	0
New York Life	874	0	874	0	0	0	0	0	0
Hawaii Employees	855	17	112	6	354	5	0	0	361
Exxon	829	820	0	9	0	0	0	0	0
Nat'l Rural Electric Co-op	805	333	244	228	0	0	0	0	0
Armco	740	0	650	90	0	0	0	0	0
UMWA	675	0	515	160	0	0	0	0	0
Trans World Airlines	617	341	180	96	0	0	0	0	0
Kentucky Teachers	611	89	420	64	38	0	0	0	0
BP America	588	285	126	105	0	13	11	13	35
Chicago School	556	0	37	519	0	0	0	0	0
Louisiana Employees	518	0	518	0	0	0	0	0	0
Louisiana Teachers	503	0	0	503	0	0	0	0	0
Delta Air Lines	450	200	250	0	0	0	0	0	0
Digital Equipment	450	na	na	na	na	na	na	na	na
Chevron	405	0	0	405	0	0	0	0	0
Caterpillar	350	350	0	0	0	0	0	0	0
K mart	350	0	307	0	0	0	0	0	43
Oklahoma Teachers	350	0	60	200	0	0	0	0	90
Los Angeles City	300	0	0	300	0	0	0	0	0
Arkansas Teachers	283	0	0	283	0	0	0	0	0
Illinois Municipal	245	0	0	245	0	0	0	0	0
Rhode Island	205	0	0	205	0	0	0	0	0
United Methodist Church	175	0	136	35	4	0	0	0	0
Los Angeles Water & Power	162	0	0	162	0	0	0	0	0
Mississippi Employees	156	0	0	156	0	0	0	0	0
Citibank	152	0	0	0	117	35	0	0	0
Pacific Telesis	151	0	0	151	0	0	0	0	0
Bakery & Confectionery	145	0	0	0	0	0	0	0	145
NCR	140	na	na	na	na	na	na	na	na
Los Angeles Fire & Police	138	na	na	na	na	na	na	na	na
S. California Edison	125	90	0	0	0	0	0	0	35
Texaco	110	na	na	na	na	na	na	na	na
TRW	108	92	0	16	0	0	0	0	0
American Airlines	100	0	0	100	0	0	0	0	0
New Mexico Employees	100	0	15	80	5	0	0	0	0
United Parcel Service	97	0	0	0	12	0	0	0	85
Teamsters, Central States	69	0	0	59	0	0	0	0	10
Monsanto	67	0	67	0	0	0	0	0	0
Chicago Municipal	58	0	0	58	0	0	0	0	0
Johnson & Johnson	55	0	55	0	0	0	0	0	0
Kansas Employees	39	0	0	0	0	0	0	0	39
Southern Baptist	36	0	0	0	19	0	0	0	17
Iowa Employees	34	0	0	34	0	0	0	0	0
Chicago Police	30	0	0	30	0	0	0	0	0
S. California UFCW	30	0	0	23	4	0	0	0	3
Georgia-Pacific	28	na	na	na	na	na	na	na	na
Minnesota Mining & Mfg.	22	0	0	0	0	0	22	0	0
Illinois State Universities	22	22	0	0	0	0	0	0	0
Total	**486,347**	**152,485**	**227,388**	**36,525**	**26,857**	**5,883**	**5,422**	**629**	**24,958**

University of California

	($ millions)
Total assets	12,471
Defined benefit	11,216
Defined contribution	1,255
Employer DB contributions	162
Benefit payments	166
Employer DC contributions	na
Internally managed assets:	
Total DB	11,216
Total DC	1,255
Defined benefit asset mix:	
Stocks	66%
Fixed income	33%
Cash equivalents	1%

OAKLAND, Calif. — As of Sept. 30, the University of California's total employee benefit assets decreased 3.3% to $12.471 billion from $12.9 billion a year earlier. Defined benefit assets decreased 4.4% during the same period, to $11.216 billion from $11.736 billion. The defined contribution assets, in 403(b) plans, increased 7.8%, to $1.255 billion from $1.164 billion. All assets are managed internally.

Security Pacific is the master trustee and global custodian.

Key personnel overseeing the investment management of the fund are Herbert M. Gordon, treasurer, and Patricia A. Small, associate treasurer.

Caterpillar Inc.

	($ millions)
Total assets	4,221
Defined benefit	3,619
Total defined contribution	602
Profit-sharing	6
Thrift or savings	398
401(k)	198
Employer DB contributions	72
Benefit payments	233
Employer DC contributions	16
Internally managed assets:	
Total DB	350
Hedging devices used:	
Stock options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	51%
Fixed income	36%
Cash equivalents	7%
Real estate equity	6%
Defined contribution asset mix:	
Company stock	100%

PEORIA, Ill. — As of Sept. 30, Caterpillar Inc.'s total employee benefit assets decreased 11.7% to $4.221 billion from $4.779 billion a year earlier. Defined benefit assets decreased 12.9% during the same period, to $3.619 billion from $4.154 billion. Defined contribution assets decreased 3.7%, to $602 million from $625 million.

Equity managers: Domestic — Caterpillar Investment; Delaware Investment; Jennison; Oppenheimer; PRIMECAP.

International — Baring International; Fidelity International; Mellon Capital; Mercator.

Fixed-income managers: Domestic (immunized) — Chase Investors and J.P. Morgan.

Real estate managers: Aetna; Brinson; Equitable; LaSalle.

Tactical asset allocation manager: Mellon Capital.

The master trustee and global custodian is Northern Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Robert Frantz, manager-employee benefit funds; and Brian Christensen and Mike Pond, benefit funds coordinators.

Chevron Corp.

	($ millions)
Total assets*	7,157
Defined benefit	3,918
Total defined contribution	3,239
Employer DB contributions	0
Benefit payments	305
Employer DC contributions	49
**P&I estimate*	
Internally managed assets:	
Total DB	405
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	44%
Fixed income	22%
Cash equivalents	19%
Real estate equity	10%
GICs/BICs	5%
Defined contribution asset mix:	
Company stock	84%
Other stock	3%
Cash equivalents	2%
GICs/BICs	11%

SAN FRANCISCO — *Pensions & Investments* estimates that as of Sept. 30, Chevron Corp.'s total employee benefit assets increased 1.2% to $7.157 billion from an estimated $7.069 billion a year earlier. Defined benefit assets decreased 8.4% during the same period, to $3.918 billion from $4.279 billion. Defined contribution assets increased 16.1%, to $3.239 billion from $2.79 billion. All figures are *P&I* estimates.

Equity managers: Domestic — Sanford Bernstein; Dodge & Cox; First Pacific; Franklin Asset; Jennison; Merus; J.P. Morgan; RCM; Rosenberg Institutional; and State Street Bank.

Fixed-income managers: Domestic — Discount Corp.; J.P. Morgan; PIMCO; State Street Research; and STW.

Real estate managers: Equitable; Prudential; and RREEF.

Other managers: Concord Partners; Hellman & Friedman; KKR; Mellon Capital; and Wells Fargo.

The master trustee is Bankers Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are M.R. Klitten, vice president-finance; D.G. Henderson, assistant comptroller; and N.G. Darling, manager-investment analysis.

Municipal Employees' Annuity and Benefit Fund of Chicago

	($ millions)
Total assets*	2,068
Defined benefit	2,068
Employer contributions	100
Benefit payments	125
**as of June 30, 1990*	
Internally managed assets	58
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	43%
Fixed income	29%
Cash equivalents	14%
Real estate equity	5%
Mortgages	4%
Venture capital	5%

CHICAGO — As of June 30, the Municipal Employees' Annuity and Benefit Fund of Chicago's total employee benefit assets increased 12.1% to $2.068 billion from $1.845 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Ariel; Bankers Trust; Brinson Partners; Chancellor; Chicago Asset; Hawthorne; Keeley; Oppenheimer; and Weiss, Peck & Greer.

International — Frank Russell.

Fixed-income managers: Domestic — Alliance; Bankers Trust; Brinson Partners; Cisneros; and Hawthorne.

Real estate managers: Prudential; Public Storage; and Smith Barney Birtcher.

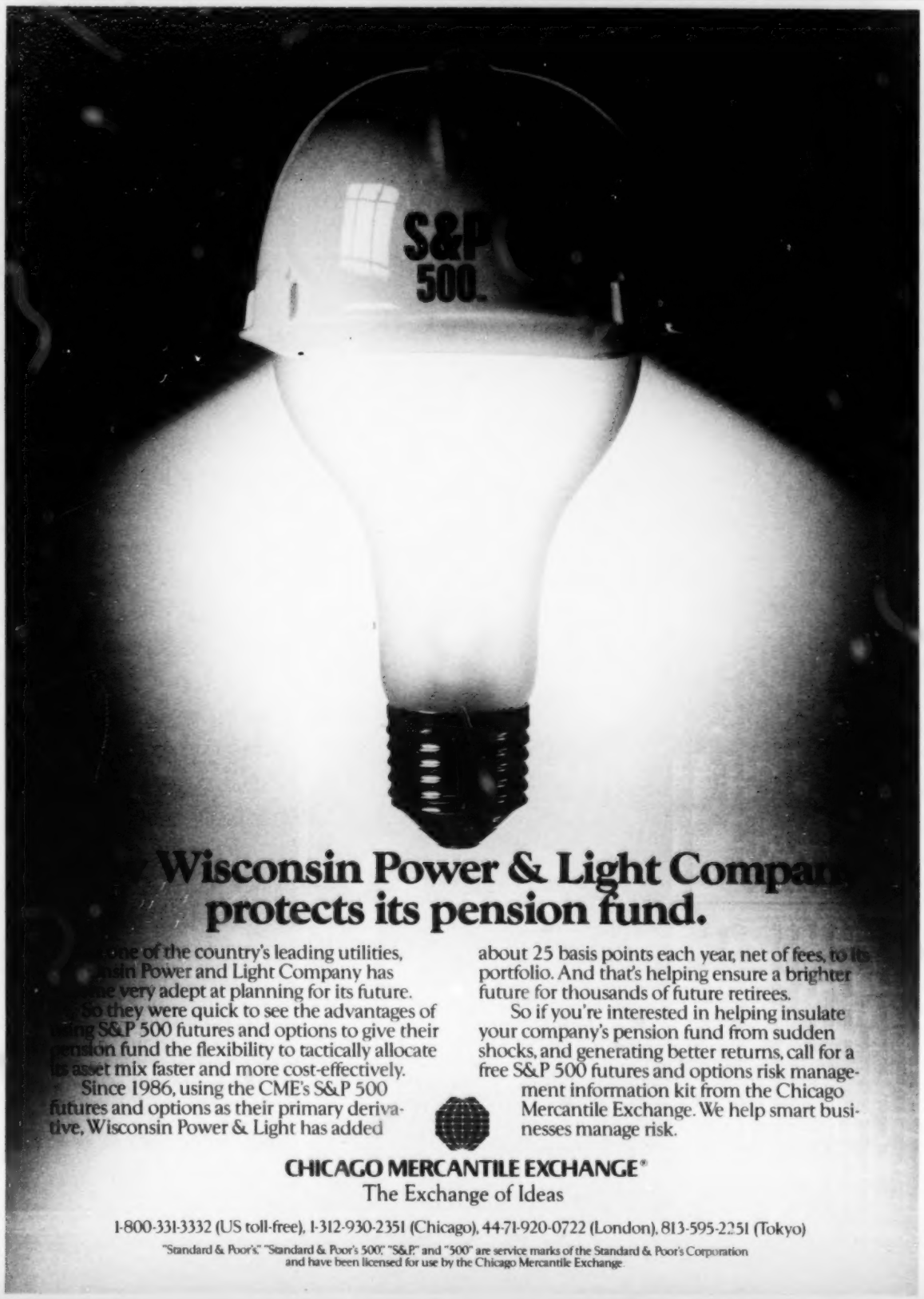
Other managers: Chancellor; First Analysis; and Mesirow.

The master custodian is Continental Illinois; the investment consultant is Becker, Burke.

Key personnel overseeing the investment management of the fund are Thomas J. Stack, executive director; Michael J. Nehf, comptroller; and Paul A. Cronin, accountant.

Policemen's Annuity & Benefit Fund of Chicago

	($ millions)
Total assets	1,571
Defined benefit	1,571
Employer DB contributions	82
Benefit payments	116
Internally managed assets	30
Defined benefit asset mix:	
Stocks	32.2%
Fixed income	48.8%



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Cash equivalents	9%
Real estate equity	10%

CHICAGO — As of Sept. 30, the Policemen's Annuity & Benefit Fund of the City of Chicago's total employee benefit assets decreased 1.5% to $1.571 billion from $1.595 billion a year earlier. All assets are defined benefit assets.

Equity managers: Domestic — American National; Brinson; Chicago Asset; Chicago Corp.; Continental Capital; Oppenheimer; and Weiss, Peck & Greer.

International — Brinson; Rowe Price-Fleming; and State Street Bank.

Fixed-income managers: Domestic — American National; Brinson; Duff & Phelps; Kemper Asset; and Lincoln Capital.

International — Brinson Partners.

Real estate managers: Brinson; Heitman; JMB Realty; Public Storage; and Frank Russell Trust.

Venture capital: Brinson and Chancellor.

Limited partnership: Zell/Chilmark.

The master custodian is Continental National Bank; the investment consultant is Ennis, Knupp & Associates.

Key personnel overseeing the investment management of the fund are the Board of Trustees and James B. Waters Jr.

Public School Teachers' Pension and Retirement Fund of Chicago

	($ millions)
Total assets*	3,611
Defined benefit	3,611
Employer DB contributions	143
Benefit payments	159
as of Aug. 31, 1990	
Internally managed assets	556
Defined benefit asset mix:	
Stocks	30%
Fixed income	50%
Cash equivalents	20%

CHICAGO — As of Aug. 31, 1990, the Public School Teachers' Pension and Retirement Fund of Chicago's defined benefit assets increased 3.1% to $3.611 billion from an estimated $3.502 billion Sept. 30, 1989.

Equity managers: Domestic — ANB Investment; Capital Supervisors.

Fixed-income managers: Domestic — Capital Supervisors.

The master trustee is the Chicago city treasurer. The consultant is Mercer.

The key person overseeing the investment management of the fund is James F. Ward, executive director.

Chrysler Corp.

Total assets	5,096
Defined benefit	4,122
Total defined contribution	974
401(k)	804
Other	171
Employer DB contributions	840
Benefit payments	617
Employer DC contributions	18
Internally managed assets:	
Total DB	1,185
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	54%
Fixed income	42%
Cash equivalents	1%
Real estate equity	3%
Defined contribution asset mix:	
Company stock	6.8%
Other stock	4.6%
Cash equivalents	34.6%
GICs/BICs	35.9%
Other	18.1%

HIGHLAND PARK, Mich. — As of Sept. 30, Chrysler Corp.'s total employee benefit assets decreased 6.8% to $5.096 billion from $5.467 billion a year earlier. Defined benefit assets decreased 8.4% during the same period, to $4.122 billion from $4.498 billion. Defined contribution assets increased 0.5%, to $974 million from $969 million.

Equity managers: Domestic — Acorn; Ariel; Associated Capital Investors; Atalanta Sosnoff; Avatar; Bankers Trust; Bear Stearns Asset; Sanford C. Bernstein; Chase Investment; Columbus Circle; Daiwa International; Deutsche Bank Capital; Carl Domino; Fidelity Management Trust; GE Investment; Seth Glickenhaus; Greaves Capital; Hancock Capital Growth; Harris Associates; Hotchkis and Wiley; InterMedia Partners; Investment Research; Leavy Investment; Manufacturers National Detroit; Merrill Lynch Asset; Mitchell Hutchins Asset; NCM; Pacific Asset Partners; Palley-Needelman; Perpetuity Asset; Reimer & Koger; Rothschild International; Fayez Sarofim; Shearson Lehman Capital; Smith Barney; Trust Co. of the West; Veronis, Suhler; WestMark Systems; Westwood.

Fixed-income managers: Aetna; Bank of New York; Bankers Trust; Blackstone Short Duration; Metropolitan Realty; Morgan Guaranty Trust; J.P. Morgan Petroleum Fund II; Morgan Stanley Asset; National Bank of Detroit; Smith Barney; Solon Asset; State Street Research; Travelers; Trust Co. of the West.

Real estate managers: JMB; Prudential; RREEF; Shearson Lehman Capital.

The master trustee and global custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are T.J. Osborn, treasurer; T.P. Capo, assistant treasurer; and R.P. Flynn, manager-pension fund investments.

CIGNA Corp.

	($ millions)
Total assets	1,711
Defined benefit	1,107
Total defined contribution	604
Profit-sharing	97
Thrift or savings	431
Other	76
Employer DB contributions	29
Benefit payments	53
Employer DC contributions	25
Internally managed assets:	
Total DB	1,106
Total DC	604
Defined benefit asset mix:	
Stocks	47.7%
Fixed income	43.7%
Cash equivalents	0.4%
Real estate equity	8.2%
Defined contribution asset mix:	
Company stock	4%
Other stock	11%
Fixed income	84%
Cash equivalents	1%

HARTFORD, Conn. — As of Sept. 30, CIGNA Corp.'s total employee benefit assets declined 3.6% to $1.711 billion from $1.775 billion a year earlier. Defined benefit assets declined 7.3% during the same period, to $1.107 billion from $1.194 billion. Defined contribution assets increased 3.9% to $604 million from $581 million.

All assets are managed by CIGNA affiliates except for $1.5 million in realty assets managed by Coldwell Banker.

The master trustee is CG Trust; the consultant is CIGNA Asset Advisors.

Key personnel overseeing the investment management of the fund are James G. Stewart, executive vice president and chief financial officer; and George R. Trumbull, executive vice president and chief investment officer.

Citibank N.A.

	($ millions)
Total assets	2,006
Defined benefit	1,299
401(k)	707
Employer DB contributions	0
Benefit payments	7
Employer DC contributions	94
Internally managed assets:	
Total DB	152
Total DC	428
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	74%
Fixed income	17%
Real estate equity	9%
Defined contribution asset mix:	
Company stock	16.1%
Other stock	33.7%
Fixed income	10.8%
Cash equivalents	39.4%

NEW YORK — As of Sept. 30, Citibank N.A.'s total employee benefit assets decreased 2% to $2.006 billion from $2.056 billion a year earlier. Defined benefit assets decreased 4%

Top 200 funds with defined contribution assets managed internally

($ millions)

Fund	Total	Equities	Bonds	Short-term	Real estate	Other
TIAA-CREF	83,100	30,600	42,700	3,600	4,600	1,600
Federal Retirement Thrift	6,700	0	0	6,700	0	0
Procter & Gamble	5,770	4,829	0	140	0	801
General Electric	4,634	891	2,272	253	0	1,218
Sears, Roebuck	4,518	2,678	702	1,136	0	0
Exxon	2,663	0	0	2,663	0	0
Texas Municipal	2,400	0	2,400	0	0	0
Texas County & District	2,297	0	2,283	14	0	0
Prudential Insurance	1,559	227	1,332	0	0	0
Evangelical Luthern	1,239	103	1,032	97	7	0
Pacific Telesis	1,193	1,193	0	0	0	0
Metropolitan Life	992	na	na	na	na	na
Aetna	983	271	712	0	0	0
Grumman	972	265	576	131	0	0
Halliburton	929	0	0	0	0	929
Tenneco	838	153	0	685	0	0
J.C. Penney	805	na	na	na	na	na
NYNEX	792	0	0	0	0	792
Equitable Life	740	106	0	0	3	631
Union Carbide	634	na	na	na	na	na
CIGNA	604	93	507	4	0	0
Bechtel Power	517	97	177	243	0	0
Travelers	511	27	357	0	0	127
Minnesota Mining & Mfg.	507	0	507	0	0	0
Citibank	428	149	0	0	0	279
Georgia-Pacific	379	0	0	0	0	379
USX	370	na	na	na	na	na
Eli Lilly	355	0	355	0	0	0
New Jersey	274	181	28	65	0	0
General Dynamics	243	0	243	0	0	0
New York Life	231	na	na	na	na	na
United Parcel Service	138	78	0	0	35	25
Minnesota State Board	86	0	86	0	0	0
Nat'l Rural Electric Co-op	69	27	0	42	0	0
Consolidated Natural Gas	27	na	na	na	na	na
Atlantic Richfield	11	0	11	0	0	0
Total	**128,506**	**41,988**	**58,289**	**15,775**	**4,845**	**8,781**

Top 200 funds with indexed assets managed internally

($ millions)

Fund	Total	Defined benefit		Defined contribution*
		Indexed equities	Indexed bonds	Indexed equities
TIAA-CREF	21,300	0	0	21,300
California State Teachers	14,519	0	14,519	0
New York State & Local	13,914	13,914	0	0
California Employees	13,800	13,800	0	0
New York State Teachers	13,019	13,019	0	0
Florida State Board	6,640	4,036	2,604	0
Minnesota State Board	4,400	0	4,400	0
General Electric	4,157	3,641	0	516
Du Pont	3,246	3,246	0	0
Colorado Employees	1,888	1,888	0	0
NYNEX	1,555	849	706	0
Maryland State	1,354	844	510	0
Chrysler	1,185	694	491	0
Sears, Roebuck	914	522	0	392
Ameritech	836	716	120	0
Kentucky Retirement	835	835	0	0
Prudential Insurance	833	638	195	0
Exxon	820	820	0	0
State of Michigan	691	691	0	0
Washington State Board	677	0	677	0
Westinghouse Electric	635	396	239	0
GTE	595	595	0	0
UMWA	515	0	515	0
Alabama Retirement	481	481	0	0
Texas Employees	481	481	0	0
San Francisco City/County	454	454	0	0
Pennsylvania School	414	216	198	0
Deere	391	391	0	0
Caterpillar	350	350	0	0
Travelers	321	233	61	27
Virginia Retirement	238	238	0	0
Kentucky Teachers	183	89	94	0
Delta Air Lines	175	175	0	0
CIGNA	171	140	31	0
Louisiana Employees	107	0	107	0
Monsanto	67	0	67	0
Aetna	37	37	0	0
S. California Edison	25	25	0	0
Equitable Life	23	23	0	0
Total	**112,248**	**64,477**	**25,534**	**22,235**

*No defined contribution plan reported having indexed bonds managed internally

during the same period, to $1.299 billion from $1.356 billion. Defined contribution assets increased 1%, to $707 million from $700 million.

Equity managers: Domestic - Chancellor.

International - Citicorp Investment.

Fixed-income managers: Chancellor.

Real estate managers: Citicorp Real Estate.

The master custodian is Citibank.

The key person overseeing the investment management of the fund is Ronald Walter, vice president.

Colorado Public Employees Retirement Association

	($ millions)
Total assets	9,195
Defined benefit	9,195
Employer DB contributions	252
Benefit payments	326
Internally managed assets	7,873
Defined benefit asset mix	
Stocks	44%
Fixed income	36.3%
Cash equivalents	4%
Real estate equity	6.3%
Mortgages	3.2%
GICs/BICs	4.9%
Other	1.3%

DENVER — As of Sept. 30, the Colorado Public Employees Retirement Association's total employee benefit assets decreased 0.3% to $9.195 billion from $9.227 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Denver Investment; Janus; United Capital Management.

International — Alliance Capital; Baring International; Brinson Partners; Dunedin Fund; Morgan Grenfell; Nomura Capital; Philippe; Schroder Capital.

Real estate managers: Heitman; La Salle; Prudential.

Other managers: Cattanach; Centennial; Columbine; Colorado Venture Management; John Hancock Fund.

The master custodian and global custodian is Northern Trust; the investment consultant is Mercer.

The key person overseeing the investment management of the fund is Norman Benedict, deputy executive director.

Commonwealth Edison Co.

	($ millions)
Total assets	2,029
Defined benefit	2,029
Employer DB contributions	na
Benefit payments	na
Internally managed assets	1,186
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	44%
Fixed income	48%
Cash equivalents	8%

CHICAGO — As of Sept. 30, Commonwealth Edison Co.'s total employee benefit assets decreased 6.1% to $2.029 billion from $2.161 billion a year earlier. All assets are defined benefit.

The master custodian is Northern Trust.

Key personnel overseeing the investment management of the fund are Howard R. Carlson, manager of investments; Rickard P. Schwartz, senior portfolio manager; and Michael J. Borrelli, investment research director.

The State of Connecticut Trust Funds

	($ millions)
Total assets	7,902
Defined benefit	7,902
Employer DB contributions	na
Benefit payments	na
Internally managed assets	1,185
Defined benefit asset mix:	
Stocks	44.85%
Fixed income	32.1%
Cash equivalents	3%
Real estate equity	16.5%
Mortgages	2.75%
Venture capital	0.8%

HARTFORD, Conn. — As of Sept. 30, the State of Connecticut Trust Funds' total employee benefit assets decreased 1.2% to $7.902 billion from $7.996 billion a year earlier. All the assets are defined benefit.

Equity managers: Domestic — Aetna; Ariel; Bankers Trust; Capital Guardian; Concord Capital; Connecticut National; Franklin; One Lewis; Oppenheimer; Phoenix; Roanoke; and Wright.

International — Boston International; Capital Guardian; Fidelity; Nomura; and Schroder.

Fixed-income managers: Domestic — Bear Stearns; Loomis Sayles; PIMCO; Standish Ayer; and STW.

International — Julius Baer; Brinson Partners; Smith Barney; and State Street.

Real estate managers: Aetna; Allied Partners; CIGNA; Copley; Hancock, Hart Advisors; Heitman; JMB; LaSalle; J.P. Morgan; Phoenix; Public Storage; RREEF; Sentinel; State Street; and TCW.

Venture capital manager: Crossroads.

The master trustee and global custodian is Boston Safe Deposit; the investment consultants are TPF&C (domestic) and Pension Consulting Alliance (international).

Key personnel overseeing the investment management of the fund are Frank McDermott, chief investment officer and assistant treasurer; and John C. Winchester and Silvia Ferrell Jones, senior investment officers.

Consolidated Edison Co. of New York Inc.

	($ millions)
Total assets	3,257
Defined benefit	2,883
Total defined contribution	374
Employer DB contribution	na
Benefit payments	na
Employer DC contributions	na

NEW YORK — As of Sept. 30, Consolidated Edison Co. of New York Inc.'s total employee benefit assets decreased less than 1% to $3.257 billion from $3.28 billion a year earlier. Defined benefit assets decreased 2.7% during the same period, to $2.883 billion from $2.962 billion. Defined contribution assets increased 17.6%, to $374 million from $318 million.

Managers: Aetna, Batterymarch; Boston Co.; Chancellor; Equitable, First Manhattan; JMB; WR Lazard; Mellon; Metropolitan Life; J.P. Morgan; Prudential; Putnam; State Street Research; Travelers; and Wells Fargo.

The master custodian and global custodian is Bankers Trust; the investment consultant is Evaluation Associates.

The key person overseeing the investment management of the fund is John Bell, assistant treasurer.

Consolidated Natural Gas

	($ millions)
Total assets	1,607
Defined benefit	926
Total defined contribution	681
Other	681
Employer DB contributions	0
Benefit payments	33
Employer DC contributions	22
Internally managed assets:	
Total DC	27
Defined benefit asset mix:	
Stocks	47%
Fixed income	1%
Cash equivalents	16%
Annuities	36%
Defined contribution asset mix:	
Company stock	71%
Other stock	3%
Cash equivalents	4%
GICs/BICs	21%
Loans	1%

PITTSBURGH — As of Sept. 30, Consolidated Natural Gas Co.'s total employee benefit assets decreased 2.5% to $1.607 billion from $1.648 billion a year earlier. Defined benefit assets decreased 4.5% during the same period, to $926 million from $970 million. Defined contribution assets, in a thrift plan with a 401(k) feature, increased 0.4%, to $681 million from $678 million.

Equity managers: Domestic — BEA Associates; Lynch & Mayer; Quest; RCM; W.H. Reaves; Rosenberg Institutional.

Fixed-income managers: Domestic — Bankers Trust; Equitable; Prudential.

The master trustee is Bankers Trust; the investment consultant is Lewis Bailey Associates.

Donald W. Borneman, assistant vice president-asset management, oversees investment management of the fund.

Cooper Industries Inc.

	($ millions)
Total assets	1,740
Defined benefit	920

Top 200 funds with defined benefit assets in indexed equities and bonds

($ millions)

Fund	Total	Indexed equities	Indexed bonds
New York City	22,146	0	22,146
California State Teachers	20,005	9,175	10,830
New York State & Local	13,914	13,914	0
California Employees	13,800	13,800	0
New York State Teachers	13,019	13,019	0
AT&T	11,475	7,639	3,836
Florida State Board	8,47[illegible]	5,868	2,604
Minnesota State Board	7,623	2,188	5,435
NYNEX	4,638	3,372	1,266
Pennsylvania School	3,748	1,239	2,509
General Electric	3,641	3,641	0
Teamsters, Central States	3,401	959	2,442
Ford Motor	3,300	3,000	300
Du Pont	3,246	3,246	0
Washington State Board	3,116	2,439	677
Maryland State	2,995	2,485	510
Virginia Retirement	2,869	2,869	0
Pennsylvania Employes	2,625	2,008	617
Southwestern Bell	2,382	2,382	0
Teamsters, Western	2,122	1,372	750
Mississippi Employees	2,077	704	1,373
Colorado Employees	1,888	1,888	0
Exxon	1,691	1,260	431
Illinois Teachers	1,544	1,124	420
Arizona State	1,529	855	674
Illinois State Universities	1,461	1,135	326
North Carolina	1,424	1,424	0
Connecticut Trust Funds	1,421	1,287	134
Operating Engineers	1,276	425	851
Kentucky Retirement	1,275	835	440
Ameritech	1,238	716	522
Pacific Telesis	1,229	1,229	0
Chrysler	1,185	694	491
Iowa Employees	1,105	653	452
Hospital/Health Care	1,094	933	161
Rhode Island	1,050	1,012	38
UMWA	1,015	500	515
Illinois Municipal	966	610	356
Indiana Employees	900	0	900
Tennessee Valley Authority	876	876	0
Commonwealth Edison	862	862	0
Ohio School Employees	862	862	0
Prudential Insurance	836	638	198
Unisys	832	832	0
Chicago School	827	827	0
Westinghouse Electric	813	574	239
Los Angeles Fire & Police	795	795	0
United Technologies	780	780	0
Utah State	750	750	0
Chicago Police	728	310	418
State of Michigan	691	691	0
Tenneco	679	494	185
GTE	677	677	0
Los Angeles City	654	254	400
Georgia Teachers	648	648	0
World Bank	632	632	0
Maine State	601	417	184
Philip Morris	600	600	0
Raytheon	588	588	0
Nevada Employees	577	577	0
Nat'l Electrical Contractors	530	530	0
Sears, Roebuck	522	522	0
Pacific Gas & Electic	501	501	0
Oklahoma Teachers	500	0	500
Idaho Employees	493	261	232
Alabama Retirement	481	481	0
Texas Employees	481	481	0
New Mexico Employees	480	480	0
Delaware State	473	235	238
San Francisco City/County	454	454	0
Kentucky Teachers	442	89	353
Amoco	425	425	0
I.A.M. National Pension	419	202	217
S. New England Telephone	407	278	129
Deere	405	405	0
Allied-Signal	399	399	0
Honeywell	398	398	0
Anheuser-Busch	366	297	69
Caterpillar	350	350	0
Ohio Police & Firemen	317	317	0
Travelers	294	233	61
Citibank	291	174	117
ALCOA	290	290	0
Presbyterian Church	2[illegible]	264	0
Alaska State	241	241	0
Chevron	23[illegible]	171	65
United Methodist Church	228	200	28
Hawaii Employees	223	223	0
Cooper Industries	205	205	0
Kansas Employees	200	200	0
Minnesota Mining & Mfg.	193	144	49
United Airlines	190	190	0
United Parcel Service	185	185	0
Bakery & Confectionery	176	102	74
Delta Air Lines	175	175	0
CIGNA	171	140	31
FPL Group	170	0	170
S. California UFCW	168	168	0
BP America	163	163	0
Mobil Oil	152	152	0
Monsanto	151	84	67
K mart	149	149	0
General Dynamics	143	143	0
Armco	134	134	0
New York Life	133	89	44
Nat'l Rural Electric Co-op	113	0	113
Louisiana Employees	107	0	107
Philips Petrolem	105	100	5
Procter & Gamble	75	39	36
S. California Edison	70	70	0
Motorola	54	54	0
PPG Industries	48	48	0
Inland Steel	43	43	0
ITT	39	39	0
Aetna	37	37	0
Hercules	25	25	0
Equitable Life	23	23	0
Southern Baptist	4	4	0
Total	**233,724**	**137,389**	**86,335**

Total defined contribution	820
Thrift or savings	246
401(k)	416
Other	158
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Defined benefit asset mix:	
Stocks	22%
Cash equivalents	78%
Defined contribution asset mix:	
Company stock	31%
Other stock	12%
Cash equivalents	6%
GICs/BICs	51%

HOUSTON — As of Sept. 30, Cooper Industries Inc.'s total employee benefit assets increased 2.4% to $1.74 billion from $1.7 billion a year earlier. Defined benefit assets decreased 3.2% during the same period, to $920 million from $950 million. Defined contribution assets increased 9.3%, to $820 million from $750 million.

Equity managers: Domestic — Mellon Capital.

Other managers: Fischer, Francis, Trees & Watts; J.P. Morgan; T. Rowe Price.

The master trustee is Citibank.

The key person overseeing the investment management of the fund is Dwight S. Kadar, director.

Top 200 funds with assets in private placements

Defined benefit

Fund	($ millions)
Wisconsin State Board	2,873
AT&T	1,519
General Electric	1,400
Alabama Retirement	1,066
State of Michigan	560
Colorado Employees	314
New York State Teachers	303
Kansas Employees	302
Washington State Board	181
Prudential Insurance	172
GTE	139
Honeywell	125
Minnesota Mining & Mfg.	125
USX	120
Iowa Employees	115
Ford Motor	100
Missouri School	88
North Carolina	80
Pacific Gas & Electric	77
Los Angeles County	73
California State Teachers	69
Monsanto	61
Owens-Illinois	58
Arkansas Teachers	55
San Francisco City/County	44
Kentucky Retirement	42
Maine State	41
Union Carbide	41
American Airlines	40
Textron	40
Travelers Insurance	40
Atlantic Richfield	37
Chicago School	28
Anheuser-Busch	26
S. New England Telephone	25
Xerox	25
General Dynamics	24
Illinois State Board	20
Los Angeles Water & Power	17
CIGNA	16
Du Pont	15
Maryland State	11
Delaware State	8
Armco	5
New Mexico Employees	5
Equitable Life	4
Commonwealth Edison	3
Pennsylvania Employes	3
Virginia Retirement	3
World Bank	1
Total	**10,539**

Defined contribution

Fund	($ millions)
TIAA-CREF	11,200
Xerox	6
Total	**11,206**

D

Deere & Co.

	($ millions)
Total assets	2,450
Defined benefit	2,144
Total defined contribution*	306
Profit-sharing	5
401(k)	301
Employer DB contributions	90
Benefit payments	185
Employer DC contributions	17
*as of Aug. 31, 1990	
Internally managed assets:	
Total DB	1,945
Defined benefit asset mix:	
Stocks	72%
Fixed income	23.6%
Cash equivalents	1.6%
Real estate equity	3.4%
Other	1.4%
Defined contribution asset mix:	
Company stock	8%
Other stock	18%
GICs/BICs	74%

MOLINE, Ill. — As of Sept. 30, Deere & Co.'s total employee benefit assets decreased 9.9% to $2.45 billion from $2.72 billion a year earlier. Defined benefit assets decreased 14.2% during the same period, to $2.144 billion from $2.5 billion. Defined contribution assets increased 39%, to $306 million from $220 million.

Equity managers: Domestic — Batterymarch; Morgan Guaranty; and Roll & Ross.

International — Acadian; Dimensional; and Roll & Ross.

Real estate managers: AEW; Copley; LaSalle; Morgan Guaranty; and TCW.

The master trustee and global custodian is Boston Safe.

The key person overseeing the investment management of the fund is Dennis R. Schwartz, managing director-pension fund and investments.

State of Delaware

	($ millions)
Total assets*	1,733
Defined benefit	1,733
Employer DB contributions	73
Benefit payments	70
*as of June 30, 1990	
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	43.4%
Fixed income	37.6%
Cash equivalents	13.9%
Real estate equity	0.8%
Venture capital	4.3%

DOVER, Del. — As of June 30, the State of Delaware's total employee benefit assets increased 10.2% to $1.733 billion from $1.572 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Cadence; Equity Link Investors; Froley Revy; Lincoln Capital; Mellon Capital; T. Rowe Price; TCW; Trinity; Wells Fargo; and Wilmington Capital.

International — Batterymarch and HD International.

Fixed-income managers: Domestic — Mellon Capital; Weiss, Peck & Greer; and Wells Fargo.

International — NM Rothschild.

Real estate managers: Aetna Life; Citibank; John Hancock; and Retail Property Trust.

Other managers — Accel Partners; Advanced Technology Ventures; Brentwood; Cherry Tree Ventures; Dougery Jones & Wilder; Fidelity Daily Income; Morgan Holland; Norton & Associates; Onset Enterprises; T. Rowe Price; Scudder, Stevens & Clark; Spectra Enterprises; Julian Cole Stein; and Summit Ventures.

The master custodian is Mercantile Safe Deposit; the investment consultant is Ashford Capital Management.

Key personnel overseeing the investment management of the fund are Dale Stratton, chairman-investment committee; Theodore Ashford, investment committee executive secretary; and C. Raeford Minix, chairman-board of pension trustees.

Delta Air lines Inc.

	($ millions)
Total assets	3,977
Defined benefit	3,175
Total defined contribution	802
Thrift or savings	750
401(k)	27
ESOP	25
Employer DB contributions	100
Benefit payments	85
Employer DC contributions	35
Internally managed assets:	
Total DB	450
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	59%
Fixed income	23%
Cash equivalents	10%
Real estate equity	3%
Other	5%
Defined contribution asset mix:	
Company stock	12%
Other stock	12%
Fixed income	12%
GICs/BICs	64%

ATLANTA — As of Sept. 30, Delta Air Line Inc.'s total employee benefit assets decreased 1.8% to $3.977 billion from $4.05 billion a year earlier. Defined benefit assets decreased 6.6% during the same period, to $3.175 billion from $3.4 billion. Defined contribution assets increased 23.4%, to $802 million from $650 million.

The master trustee and global custodian is Harris Trust.

The key person overseeing the investment management of the fund is James B. Taylor, assistant vice president-investment management.

City of Detroit Retirement Systems

	($ millions)
Total assets*	3,925
Defined benefit	3,423
Total defined contribution	502
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
*P&I estimate	

DETROIT — As of June 30, *Pensions & Investments* estimates the City of Detroit Retirement Systems total employee benefit assets were $3.925 billion. That estimate is based on the $3.587 billion the system reported a year earlier and represents a 9.4% increase. Defined benefit assets increased 10.8% during the same period, to an estimated $3.423 billion from $3.09 billion. Defined contribution assets increased 1% to an estimated $502 million, from $497 million.

The retirement system is composed of the General Retirement System and the Police & Fire Retirement System.

The master custodian for the general system is Comerica; the police and fire system uses Manufacturers Bank. The real estate investment consultants are Meyer Real Estate Advisors and Townsend.

Key personnel overseeing the investment management of the fund are Thomas Zdrodowski, executive secretary; Nicholas Degel, assistant administrative supervisor; and Walter Starnpor, investment agent.

Digital Equipment Corp.

	($ millions)
Total assets	1,652
Defined benefit	1,345
401(k)	307
Employer DB contributions	0
Benefit payments	13
Employer DC contributions	0
Internally managed assets:	
Total DB	450

MAYNARD, Mass. — As of Sept. 30, Digital Equipment Corp.'s total employee benefit assets decreased 5.2% to $1.652 billion from $1.742 billion a year earlier. Defined benefit assets decreased 8.9% during the same period, to $1.345 billion from $1.477 billion. Defined contribution assets increased 15.8%, to $307 million from $265 million.

Equity managers: Domestic — Alliance; Bankers Trust; Capital Guardian; First Quadrant; and Wells Fargo Nikko.

International — Boston International and Capital Guardian.

Fixed-income managers: — Jennison and PIMCO.

Real estate managers: AEW.

The master trustee is Boston Safe Deposit.

The key person overseeing the investment management of the fund is A. Raymond Schmalz, group treasury manager.

Dow Chemical Co.

	($ millions)
Total assets	4,000
Defined benefit	2,500
Total defined contribution	1,500

MIDLAND, Mich. — As of Sept. 30, Dow Chemical Co.'s total employee benefit assets totaled $4 billion. Defined benefit assets totaled $2.5 billion, a decrease of 7.4% from the $2.7 billion reported a year earlier, and defined contribution assets totaled $1.5 billion.

E.I. du Pont de Nemours

	($ millions)
Total assets	17,728
Defined benefit	11,448
Total defined contribution	6,280
Thrift or savings	5,766
401(k)	192
Other	322
DB benefit payments	679
Employer DC contributions	na
Internally managed assets:	
Total DB	11,267
Defined benefit asset mix:	
Stocks	54%
Fixed income	33%
Cash equivalents	12%
Real estate equity	1%
Defined contribution asset mix:	
Company stock	7%
Other stock	6%
GICs/BICs	86%
Other	1%

WILMINGTON, Del. — As of Sept. 30, E.I. du Pont de Nemours & Co.'s total employee benefit assets decreased 5% to $17.728 billion from $18.681 billion a year earlier. Defined benefit assets decreased 11.6% during the same period, to $11.448 billion from $12.945 billion. Defined contribution assets increased 9.5%, to $6.28 billion from $5.736 billion.

Real estate managers: Trammel Crow; EQK; Hancock; Lincoln Property; J.P. Morgan; and NCNB Texas.

Venture capital managers: APA Excelsior; Capital Management Ser-

Top 200 defined benefit average asset mix

Corporate

	1990	1989
Stocks	48.7%	50.2%
Fixed-income*	34.2	32.6
Cash	7.5	7.3
Real estate equity	5.3	4.5
Mortgages	0.3	0.3
GIC/BIC	1.1	1.2
Annuities	0.6	1.3
Other	2.3	2.6
Public		
Stocks	36.7%	37.2%
Fixed-income*	46.8	44.9
Cash	7.0	9.0
Real estate equity	4.6	3.8
Mortgages	2.8	2.4
GIC/BIC	0.2	0.2
Annuities	0.0	0.0
Other	1.9	2.5
Union		
Stocks	37.3%	41.9%
Fixed-income*	40.0	44.4
Cash	8.9	5.7
Real estate equity	3.8	3.3
Mortgages	3.0	2.1
GIC/BIC	4.5	2.1
Annuities	1.5	0.0
Other	1.0	0.5

*Includes mortgage-backed securities

Top 200 defined contribution average asset mix

Corporate

	1990	1989
Company stock	27.1%	28.7%
Other stock	14.8	17.1
Fixed-income	9.5	10.0
Cash	7.2	5.7
GIC/BIC	39.6	35.7
Annuities	0.0	0.0
Other	1.8	2.8
Public		
Stocks	15.6%	25.0%
Fixed-income	73.1	63.0
Cash	9.3	5.0
GIC/BIC	2.0	2.9
Annuities	0.0	0.0
Other	0.0	4.1
Union		
Stocks	14.7%	15.3%
Fixed-income	15.3	19.3
Cash	48.6	53.4
GIC/BIC	11.7	7.3
Annuities	0.0	0.0
Other	9.7	4.7

vices; Crossroads Capital; Golder, Thoma & Cressey; Hambrecht & Quist; Horsley Keogh; Pathfinder; T. Rowe Price; Robertson Coleman & Stephens; and Warburg, Pincus.

Corporate finance: Citicorp Mezzanine Investment Fund; Water Street Corporate Recovery Fund I; and Foothill Partners.

The master custodian is Wilmington Trust; the global custodian is Chase Manhattan.

The key person overseeing the investment management of the fund is Edward J. Bassett, vice president-pension trust fund.

E

Eastern Air Lines Inc.

	($ millions)
Total assets*	2,150
Defined benefit	1,400
Total defined contribution	750
Employer DB contributions	105
Benefit payments	147
Employer DC contributions	na
P&I estimate	
Defined benefit asset mix:	
Stocks	35%
Fixed income	40%
Cash equivalents	15%
Real estate equity	10%

MIAMI — As of Sept. 30, *Pensions & Investments* estimates Eastern Air Line Inc.'s total employee benefit assets were $2.15 billion, a 10.8% decrease from the $2.41 billion the company reported a year earlier. Defined benefit assets decreased 6.7% during the same period, to $1.4 billion from $1.5 billion. Defined contribution assets were estimated at $750 million, a 17.6% decrease from the $910 million the company reported the previous year.

The defined benefit plans were terminated Oct. 5 by the Pension Benefit Guaranty Corp. and assets were transferred to the PBGC/Eastern Airlines Settlement Trust. The Eastern pilots' variable plan, a defined contribution, still exists.

Defined benefit equity managers: Domestic — Delafield; Delaware; Forstmann-Leff; INVESCO; and Pacific Financial.

Global — Templeton.

Defined benefit fixed-income managers: Domestic — Associated Capital; Caywood-Christian; Eaton Vance; Northern Trust; and Prudential.

Defined benefit real estate managers: Equitable and Prudential.

Boston Safe Deposit is the master trustee and global custodian.

Key personnel overseeing the investment management of the PBGC/Eastern trust is Charles H. Evans, senior investment adviser in Washington. Overseeing the pilots' defined contribution plan is Charles G. Dyer in Boston.

Eastman Kodak Co.

	($ millions)
Total assets*	9,000
Defined benefit	6,500
401(k)	2,500
Employer DB contributions	4
Benefit payments	332
Employer DC contributions	146
P&I estimate	
Defined benefit asset mix:	
Stocks	70%
Cash equivalents	7%
Real estate equity	9%
Annuities	7%
Other	7%
Defined contribution asset mix:	
Company stock	11%
Other stock	6%
GICs/BICs	83%

ROCHESTER, N.Y. — *Pensions & Investments* estimates Eastman Kodak Co.'s total assets were $9 billion as of Sept. 30. That estimate is based on total employee benefit assets of $9.251 reported by the company as of Dec. 31, 1989 and represents a 5.3% decrease from the estimated $9.5 billion a year earlier. Defined benefit assets declined almost 11% to an estimated $6.5 billion from the previous year's estimate of $7.3 billion. Defined contribution assets increased 13.6% to an estimated $2.5 billion from an estimated $2.2 billion in 1989.

Equity managers: Domestic — Ardsley; Baker Nye; Sanford Bernstein; Boston Co.; EAI; Fidelity; First Pacific; Hutson; Lieber; Metropolitan Life; Neuberger & Berman; Newell; Nicholas-Applegate; Oppenheimer; PRIMECAP; Rosenberg Institutional; TCW; Value Line; Wall Street Associates; Wellington; and WRM.

Global — RCB and Templeton.

International — Acadian and Emerging Markets.

Real estate managers: Aetna; AEW; Boston Co.; Cabot, Cabot & Forbes; Coldwell Banker; Copley; Equitable; GE; Goldman Sachs; JMB; Mutual of New York; National Property; PCA/Sammis; PCA/Tishman; Phoenix

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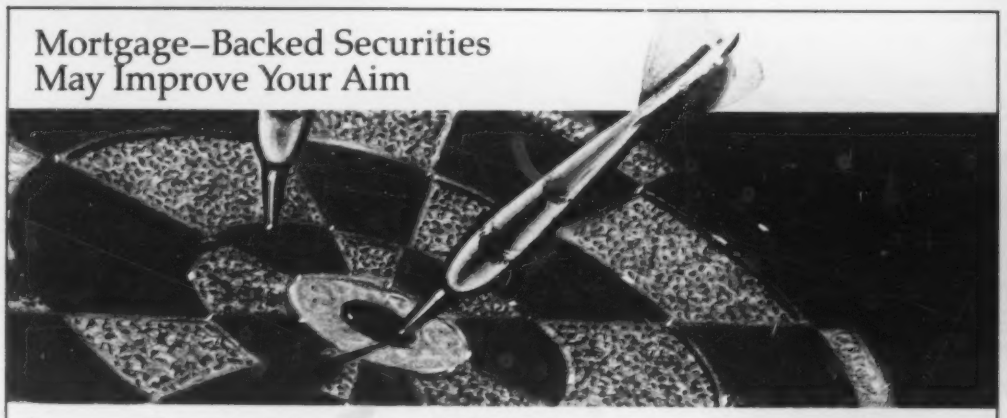

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Mutual; PMRA; Property Capital; PSI; RREEF; Schroder; and TCW.

GIC and annuity managers: Continental Assurance; Equitable; First National of Boston; John Hancock; Metropolitan Life; Mitsubishi Bank; New England; Provident National; Prudential; and TCW.

Cash manager: Discount Corp. of New York.

LBO manager: Forstmann Little.

International LBO managers: Advent and MMP Patricof.

Foreign exchange manager: FX Concepts.

Venture capital manager: Horsley Keogh.

Capital growth manager: John Hancock.

Managed futures manager: Mount Lucas.

Oil and gas managers: Chase and J.P. Morgan.

Other managers: BCI Growth; Equitable; First Reserve; Lazard Freres; Merrill Lynch; Metropolitan Life; Recovery Equity; and TCW.

Boston Safe Deposit is the master trustee and global custodian; the investment consultant is Rogers, Casey.

Key personnel overseeing the investment management of the fund are Russell L. Olson, director of pension investments; and A. Duff Lewis Jr., pension investment coordinator.

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Eaton Corp.

	($ millions)
Total assets*	1,715
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
P&I estimate	

CLEVELAND — As of Sept. 30, Eaton Corp.'s employee benefit assets totaled $1.715 billion, according to a *Pensions & Investment* estimate. The estimate is based on the $1.928 billion the company reported December 1989 as reported in the Money Market Directory.

The Church Pension Fund (Episcopal)

	($ millions)
Total assets	1,850
Defined benefit	1,850
Employer DB contributions	52
Benefit payments	53
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	52.3%
Fixed income	40%
Cash equivalents	5%
Mortgages	2.7%

NEW YORK — As of Sept. 30, total employee benefit assets of The Church Pension Fund (Episcopal) increased 0.7% to $1.85 billion from $1.837 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance and J.P. Morgan.

International — J.P. Morgan

Fixed-income managers: Domestic — Alliance and J.P. Morgan.

The master custodian, global custodian and investment consultant is Morgan Guaranty.

Key personnel overseeing the investment management of the fund are Robert A. Robinson, president; A.F. Blanchard, president-elect; and M. Fearey, executive vice president.

The Equitable Life Assurance Society of the United States

	($ millions)
Total assets	1,635
Defined benefit	895
Thrift or savings	740
Employer DB contributions	12
Benefit payments	21
Employer DC contributions	18
Internally managed assets:	
Total DB	895
Total DC	740
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	24.7%
Fixed income	64.4%
Cash equivalents	1.4%
Real estate equity	9.5%
Defined contribution asset mix:	
Other stock	14.3%
GICs/BICs	82.1%
Other	3.6%

NEW YORK — As of Sept. 30, The Equitable Life Assurance Society of the United States' total employee benefit assets declined less than 1% to $1.635 billion from $1.639 billion a year earlier. Defined benefit assets declined 4.8% to $895 million from $940 million during the same period. Defined contribution assets increased 5.9% to $740 million from $699 million.

All assets are managed by Equitable subsidiaries.

The master trustees and global custodians are Chase Manhattan Bank and Northern Trust.

Key personnel overseeing the investment management of the fund are Peter LiPuma, vice president; Raymond Colotti, executive vice president and trustee; Thomas Mann, senior vice president and trustee; and Thomas Kirwan, executive vice president and chief financial officer.

Financing and investing opportunities in post-1992 Europe will be examined Oct. 28.

Evangelical Lutheran Church in America Board of Pensions

	($ millions)
Total assets	1,833
Defined contribution	1,833
Employer DC contribution	48
Internally managed assets	1,239
Hedging devices used:	
Stock index futures	
Defined contribution asset mix:	
Stock	36.7%
Fixed income	57.6%
Cash equivalents	5.3%
Real estate	0.4%

MINNEAPOLIS — As of Sept. 30, the Evangelical Lutheran Church in America Board of Pensions' total employee benefit assets increased 2.9% to $1.833 billion from $1.782 billion a year earlier. All assets are in a 403(b) plan.

Equity managers: Domestic — Alliance; J.P. Morgan; RCM Capital; Rosenberg Institutional; Wells Fargo Nikko.

International — Acadian.

Fixed-income managers: Domestic — Baring America and London Investment.

The master trustee and global custodian is Boston Safe Deposit; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are John G. Kapanke, president; Michael L. Troutman, senior manager-investment programs; Paul "Tim" Kaspar, senior equity portfolio manager; and Christopher C. Berberet, senior bond portfolio manager.

Exxon Corp.

	($ millions)
Total assets	7,838
Defined benefit	3,226
Total defined contribution	4,612
Thrift or savings	3,461
401(k)	599
ESOP	552
Employer DB contributions	0
Benefit payments	330
Employer DC contributions	98
Internally managed assets:	
Total DB	829
Total DC	2,663
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	52%
Fixed income	21%
Cash equivalents	7%
Real estate equity	11%
Other	9%
Defined contribution asset mix:	
Company stock	40%
Other stock	3%

Top 200 funds with assets in LBOs

Fund	($ millions)
Washington State Board	1,123
New York State & Local	822
Oregon Public Employes	773
TIAA-CREF*	769
Wisconsin State Board	540
Iowa Public Employees	442
State of Michigan	389
AT&T	340
United Technologies	185
GTE	181
Illinois State Board	115
Allied-Signal	111
Utah State	90
Minnesota Mining & Mfg.	78
Delta Air Lines	75
Colorado Employees	69
California State Teachers	57
Los Angeles County	57
World Bank	56
Textron	50
ITT	45
Du Pont	31
Phillips Petroleum	30
ALCOA	25
Pennsylvania Employes	25
Grumman	9
Virginia Retirement	4
Total	**6,481**

*TIAA-CREF's figure reflects defined contribution assets. All others are defined benefit.

Cash equivalents	57%

IRVING, Texas — As of Sept. 30, Exxon Corp.'s total employee benefit assets decreased 2.8% to $7.838 billion from $8.066 billion a year earlier. Defined benefit assets decreased 15.4% during the same period, to $3.226 billion from $3.814 billion. Defined contribution assets increased 8.5% to $4.612 billion from $4.252 billion.

Equity managers: Domestic — Sanford Bernstein; Geometry Asset; and Wells Fargo Nikko.

International — State Street Bank and Wells Fargo Nikko.

Fixed-income managers: Domestic — Chase Investors; J.P. Morgan; Smith Barney; and Wells Fargo Nikko.

International — Wells Fargo Nikko.

Real estate managers: Aetna; Corporate Property Investors; Equitable; NCNB Texas; and Prudential.

Royalty managers: First City Texas and Premier Bancorp.

Insured reserves managers: Equitable; John Hancock; Prudential; and Travelers.

Venture capital manager: Horsley Keogh.

The master trustee is Bank of New York; the global custodian is State Street Bank.

Key personnel overseeing the investment management of the fund are W. Allen Harrison, assistant treasurer; James E. Bayne, manager-benefits finance and investment; and Daniel L. Dollo, senior financial coordinator.

F

Federal Retirement Thrift Investment Board

	($ millions)
Total assets	6,890
Thrift or savings	6,890
Employer DC contributions	596
Internally managed assets	6,700
Defined contribution asset mix:	
Other stock	2.1%
Fixed income	0.6%
Cash equivalents	97.3%

WASHINGTON — As of Sept. 30, the Federal Retirement Thrift Investment Board's total employee benefit assets increased 59.5% to $6.89 billion from $4.319 billion a year earlier. All of the assets are in a defined contribution plan.

Equity manager: Domestic — Wells Fargo Nikko.

Fixed-income manager: Domestic — Wells Fargo Nikko

The master custodians are the U.S. Treasury Department and Wells Fargo Institutional Trust.

Key personnel overseeing the investment management of the fund are Peter B. Mackey, director-investments; Alison L. Doone, deputy director-investments; and Monica L. Spaulding, financial analyst.

Florida State Board of Administration

	($ millions)
Total assets	19,268
Defined benefit	19,268
Employer DB contributions	1,838
Benefit payments	730
Internally managed assets	11,778
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	46%
Fixed income	32%
Cash equivalents	3%
Real estate equity	5%
Mortgages	14%

TALLAHASSEE, Fla. — As of Sept. 30, the Florida State Board of Administration's total employee benefit assets increased 3% to $19.268 billion from $18.7 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Ariel; Barnett Banks; Barrow, Hanley, Mewhinney & Strauss; Delaware; Denver; Eagle; IDS Growth; Lazard Freres Asset; Corporate Advisors; Prudential Asset; Sun Bank Capital; Westwood; Wilshire; and Wells Fargo Nikko.

International — Capital Guardian; Kleinwort Benson; Morgan Stanley; T. Rowe Price; Scudder; and Templeton.

Fixed-income managers: — Alliance; Atlantic Portfolio Analytics; Glenmede; and TCW.

Real estate managers: Aetna; Brinson Partners; CFCL Acquisition; Equitable; Goldman, Sachs; John Hancock Properties; JMB; LaSalle; Lehndorff & Babson; and Prudential Asset.

The master trustee and the global custodian is Citibank; the investment consultant is SEI Capital Resources.

Key personnel overseeing the investment management of the fund are William O. Bell III, chief of management policy; Lan Janecek, chief investment officer-equities; Carmen Hiers, chief investment officer-fixed income; and Doug Bennett, chief investment officer-real estate.

Ford Motor Co.

	($ millions)
Total assets	20,800
Defined benefit	16,900
Defined contribution	3,900
Employer DB contributions	200
Benefit payments	700
Employer DC contributions	120
Internally managed assets:	
Total DB	1,300
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	55%
Fixed income	40%
Real estate equity	5%
Defined contribution asset mix:	
Company stock	43%
Other stock	12%
Cash equivalents	13%
GICs/BICs	29%
Loans	3%

DEARBORN, Mich. — As of Sept. 30, Ford Motor Co.'s total employee benefit assets decreased 8.8% to $20.8 billion from $22.8 billion a year earlier. Defined benefit assets decreased 6.6% during the same period, to $16.9 billion from $18.1 billion. Defined contribution assets decreased 17%, to $3.9 billion from $4.7 billion.

Equity managers: Global — Alliance Capital; Ariel; Sanford Bernstein; Brinson Partners; Capital Guardian; Concord Capital; Dreman Value; Fidelity Management; Manufacturers Detroit; Mitchell Hutchins; J.P. Morgan; PRIMECAP; Sarofim Trust; Scudder, Stevens & Clark; and State Street Research.

Fixed-income managers: Global — Capital Guardian; Dewey Square; J.P. Morgan; T. Rowe Price; Sarofim Trust; State Street Research; and Wells Fargo.

Real estate managers: Aetna; Cabot, Cabot & Forbes; CIGNA; Equitable; GE; JMB; LaSalle; J.P. Morgan; NCNB; J.W. O'Connor; Prudential; Public Storage; Sentinel; and TCW.

The master trustee is Manufacturers National Bank of Detroit.

Key personnel overseeing the investment management of the fund are M.E. Maertens, manager-trust investments, and P.E. Sharp, assistant treasurer.

Top 200 funds with investments in oil & gas*

Fund	($ millions)
AT&T	197
Washington State Board	120
GTE	107
Minnesota State Board	89
General Electric	64
Honeywell	63
ITT	45
Textron	40
Southwestern Bell	38
Delta Air Lines	30
S. New England Telephone	30
Exxon	27
Ford Motor	25
Caterpillar	16
Allied-Signal	14
Xerox (DB)	14
USX	10
ALCOA	6
Hospital/Health Care	6
Owens-Illinois	2
Maine State	1
Xerox (DC)	1
Total	**$45**

*All are defined benefit funds unless otherwise noted.

FPL Group Inc.

	($ millions)
Total assets	1,823
Defined benefit	1,248
Total defined contribution	575
401(k)	482
ESOP	93
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Hedging devices used:	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	63%
Fixed income	25%
Real estate equity	6%
TAA	6%
Defined contribution asset mix:	
Company stock	45%
Other stock	12%
GICs/BICs	40%
Other	3%

NORTH PALM BEACH, Fla. — As of Sept. 30, FPL Group Inc.'s total employee benefit assets decreased 7.1% to $1.823 billion from $1.963 billion a year earlier. Defined benefit assets decreased 8.8% during the same period, to $1.248 billion from $1.369 billion. Defined contribution assets decreased 3.2%, to $575 million from $594 million.

Equity managers: Domestic — Capital Technology; General American; Fayez Sarofim; Donald Smith; and Quest Advisory.

International — Hill Samuel; Oechsle; and State Street International.

Fixed-income managers: Domestic — Wells Fargo and Western Asset.

Real estate managers: AMB; JMB; and RREEF.

Tactical asset allocation: — Wells Fargo.

The master trustee and global custodian is First Wachovia; the investment consultant is Rogers, Casey.

The key person overseeing the investment management of the fund is Robert L. McGrath, manager-trust fund investments.

G

GenCorp Inc.

	($ millions)
Total assets	1,583
Defined benefit	1,311
Total defined contribution	272
Thrift or savings	101
401(k)	171
Employer DB contributions	7
Benefit payments	67
Employer DC contributions	13
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	44.9%
Fixed income	51.6%
Real estate equity	3.5%
Defined contribution asset mix:	
Company stock	9.3%
Other stock	18.7%
GICs/BICs	72%

FAIRLAWN, Ohio — As of Sept. 30, GenCorp Inc.'s total employee benefit assets decreased 7.9% to $1.583 billion from $1.719 billion a year earlier. Defined benefit assets decreased 6.9% during the same period, to $1.311 billion from $1.408 billion. Defined contribution assets decreased 12.5%, to $272 million from $311 million.

Equity managers: Domestic — J.P. Morgan; Neuberger & Berman; and Wilkens & Nanovic.

International — Bankers Trust and J.P. Morgan.

Fixed-income managers: Domestic — ASB and Lincoln Capital.

International — Bankers Trust.

Real estate managers: First Management Group.

The master trustee is Northern Trust; the global custodians are J.P. Morgan and Bankers Trust.

Key personnel overseeing the investment management of the fund are Dave McNiff, director-investment management; and Sina Baldwin, manager-investment management.

General Dynamics Corp.

	($ millions)
Total assets	6,069
Defined benefit	3,869
401(k)	2,200
Employer DB contributions	140
Benefit payments	140
Employer DC contributions	60
Internally managed assets:	
Total DB	2,641
Total DC	243
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	30.4%
Fixed income	64.7%
Real estate equity	0.1%
GICs/BICs	4.8%
Defined contribution asset mix:	
Company stock	3.9%
Other stock	11.4%
Fixed income	16.4%
GICs/BICs	68.3%

ST. LOUIS — As of Sept. 30, General Dynamics Corp.'s total employee benefit assets increased 1.2% to $6.069 billion from $6 billion a year earlier. Defined benefit assets decreased 0.8% during the same period, to $3.869 billion from $3.9 billion. Defined contribution assets increased 4.8% to $2.2 billion from $2.1 billion.

Defined benefit managers: Alliance; Boatmen's; Delaware Investment; GE Realty, GEIC International; Jennison; Henry Kaufman; C.J. Lawrence; Lazard Freres; Lincoln Capital; Miller, Anderson; J.P. Morgan; Rosenberg Institutional Equity; Sasco Capital; and Wells Fargo-Nikko.

Defined contribution managers: Aetna; Alliance; Delaware Investment; Equitable; Mercantile Trust; Metropolitan Life; J.P. Morgan; Prudential; Rosenberg Institutional Equity; Travelers; and Wells Fargo-Nikko.

The master trustee and the global custodian is Chase Manhattan.

Key personnel overseeing the investment management of the fund are Charles Walbrandt, staff vice president-trust investment operation, and Rebecca Roesch, corporate manager-trust investment operation.

General Electric Co.

	($ millions)
Total assets	27,108
Defined benefit	22,474
401(k)	4,634
Employer DB contributions	0.084
Benefit payments	1,189
Employer DC contributions	613
Internally managed assets:	

Top 200 funds with defined contribution assets in indexed equities and bonds

($ millions)

Fund	Total	Indexed equities	Indexed bonds
TIAA-CREF	21,300	21,300	0
General Electric	518	518	0
Ford Motor	500	500	0
Philip Morris	495	495	0
Sears, Roebuck	392	392	0
AT&T	347	347	0
NYNEX	342	193	149
Indiana Employees	320	0	320
GTE	259	229	30
Martin Marietta	259	259	0
Evangelical Luthern	222	222	0
Federal Retirement Thrift	190	146	44
United Methodist Church	187	164	23
Pacific Telesis	182	120	62
Trans World Airlines	170	170	0
TRW	163	163	0
Ameritech	160	160	0
Bechtel Power	154	154	0
Unisys	150	150	0
United Airlines	150	150	0
Southwestern Bell	146	105	41
Honeywell	144	144	0
Minnesota Mining & Mfg.	131	131	0
Minnesota State Board	131	131	0
Exxon	127	127	0
United Parcel Service	119	119	0
Motorola	109	109	0
Cooper Industries	96	96	0
ITT	89	89	0
S. California Edison	70	50	20
American Electric Power	64	64	0
American Stores	62	62	0
FPL Group	59	59	0
Deere	56	56	0
GenCorp	51	51	0
General Dynamics	50	50	0
J.C. Penney	48	48	0
ALCOA	41	41	0
Allied-Signal	40	40	0
Hercules	27	27	0
Travelers	27	27	0
NCR	25	10	15
USX	20	20	0
Union Carbide	16	16	0
Anheuser-Busch	14	14	0
S. New England Telephone	14	14	0
Southern Baptist	4	4	0
Procter & Gamble	2	2	0
UMWA	2	2	0
Total	**28,342**	**27,538**	**794**

Total DB	20,404
Total DC	4,634
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	46%
Fixed income	30%
Cash equivalents	5%
Real estate equity	10%
GICs/BICs	2%
Other	7%
Defined contribution asset mix:	
Other stock	19.2%
Fixed income	49%
Cash equivalents	4.4%
GICs/BICs	26.3%
Other	1.1%

STAMFORD, Conn. — As of Sept. 30, General Electric Co.'s total employee benefit assets decreased 6.2% to $27.108 billion from $28.912 billion a year earlier. Defined benefit assets decreased 7.6% during the same period, to $22.474 billion from $24.318 billion. Defined contribution assets increased 0.9%, to $4.634 billion from $4.594 billion.

Equity managers: Domestic — Cursitor Eaton; Goldman Sachs; Marsh & Cunningham; J.P. Morgan; Morgan Guaranty; Nomura; T. Rowe Price; Progress Trusts; Fayez Sarofim; and Schroeder's.

Fixed-income managers: Domestic — Capital Holdings; Goldman Sachs; J.P. Morgan; NYSSA; and Ryan Labs.

Real estate managers: Equitable; J.P. Morgan; and Hancock.

The master trustee is State Street Bank; the investment consultants are SEI; EAI; and Callan.

Key personnel overseeing the investment management of the fund are Dale Frey, chairman and president, General Electric Investment Corp.; Arthur Bahr, executive vice president-equities; and John Myers, executive vice president-equities and trustee.

General Motors Corp.

	($ millions)
Total assets	36,300
Defined benefit	30,700
Total defined contribution	5,600
Defined benefit	1,072
Total defined contribution	530
Profit-sharing	61
401(k)	469
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	379
Internally managed assets:	
Total DB	28
Total DC	379
Defined benefit asset mix:	
Stocks	64%
Fixed income	28%
Cash equivalents	2%
Real estate equity	4%
GICs/BICs	2%
Defined contribution asset mix:	
Company stock	7%
Other stock	9%
GICs/BICs	84%

NEW YORK — As of Sept. 30, General Motors Corp.'s total employee benefit assets decreased 11.2% to $36.3 billion from $40.9 billion a year earlier. Defined benefit assets decreased 13.5% during the same period, to $30.7 billion from $35.5 billion. Defined contribution assets increased 3.7% to $5.6 billion from $5.4 billion.

Managers: Aetna; AEW; American National, Chicago; AmeriTrust; Associated Capital; Bankers Trust; Baring America; Baring International; Barrow, Hanley, Mewhinney & Strauss; Batterymarch; BEA; Beekman Capital; Sanford Bernstein; Boston Co. Real Estate; Brinson Partners; Canada Life Investment; Capital Guardian Trust; Chancellor; Chase Manhattan; Citibank; County NatWest Investment; Cypress; Delaware Investment; Dewey Square; DFA; Fidelity Management; First National Bank, Boston; Franklin Portfolio; Frontier Capital; G.T. Capital; Harris Trust; Hill Samuel; W.R. Huff; INVESCO; Jennison; Kleinwort Benson International; Lazard Freres; Lehman-Ark; Lincoln Capital; MacKay-Shields; Magten; Marathon Investment; Matrix; Mellon Bank; Merrill Lynch; Metropolitan Life; Morgan Grenfell; Morgan Guaranty Trust; Morgan Stanley; National Bank of Detroit; Nomura; Oechsle; Provident Investment; Prudential; R.P.I. Institutional; Rosenberg Institutional; Rowe Price-Fleming; N.M. Rothschild; Schroder Capital; TAL Investment; TCW Asset; United Capital; Value Line Asset; Weiss Peck & Greer; Wells Fargo Bank; and WorldInvest.

The master trustees are Bankers Trust, Mellon Bank and Chase Manhattan; the global custodian is Chase Manhattan.

Key personnel overseeing the investment management of the fund are W. Gordon Binns Jr., vice president and chief investment funds officer, and R. Charles Tschampion, director-portfolio strategy and manager relations group.

Employees' Retirement System of Georgia

	($ millions)
Total assets	3,750
Defined benefit	3,750

ATLANTA — As of Sept. 30, the Employees' Retirement System of Georgia's total employee benefit assets increased 8.4% to $3.75 billion from the $3.458 billion the Money Market Directory reported the fund had as of June 30, 1989. All assets are defined benefit.

Key personnel overseeing the investment management of the fund are Rudolph Johnson, director, and James Larche, deputy director.

Teachers Retirement System of Georgia

	($ millions)
Total assets	9,871
Defined benefit	9,871
Employer DB contributions	488
Benefit payments	343
Internally managed assets	5,992
Defined benefit asset mix:	
Stocks	40%
Fixed income	56%
Cash equivalents	4%

ATLANTA — As of Sept. 30, the Teachers Retirement System of Georgia's total employee benefit assets increased 10.8% to $9.871 billion from $8.908 billion as of June 30, 1989. All assets are defined benefit.

Equity managers: Domestic — Atlanta Capital; Citizens & Southern Trust; INVESCO; and Wellington.

The master trustee is Citizens & Southern Trust.

Key personnel overseeing the investment management of the fund are Charles W. Cary, director-investment services division and Nancie Boedy, assistant director-investment services division.

Georgia-Pacific Corp.

	($ millions)
Total assets	1,602
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Internally managed assets:	
Total DB	1,602
Total DC	na
Defined benefit asset mix:	
Stocks	39%
Fixed income	31%
Cash equivalents	23%
Real estate equity	5%
Other	2%
Defined contribution asset mix:	
Company stock	21%
Other stock	10%
Fixed income	13%
GICs/BICs	56%

ATLANTA — As of Sept. 30, Georgia-Pacific Corp. had total employee benefit assets of $1.602 billion. Defined benefit assets were $1.072 billion; defined contribution assets, $530 million.

Investment managers: — Aetna; Chancellor; Chase Manhattan; Cramer, Rosenthal & McGlynn; Home Capital; HLM Management; Husic Capital; Invista Capital; JMB; KKR; Loomis, Sayles; Mercator; Morgan Stanley; PIMCO; RREEF; TCW; Tweedy Browne; Wells Fargo Nikko; Westwood; and WorldInvest.

The master trustee is Bankers Trust; the investment consultant is Ennis, Knupp & Associates.

Key personnel overseeing the investment management of the fund are John E. Stettler, director-benefit investments/risk management; and Anthony R. Abbot, assistant director-benefit investments.

Grumman Corp.

	($ millions)
Total assets*	3,101
Defined benefit	2,130
401(k)	971
Employer DB contributions	0
Benefit payments	83
Employer DC contributions	17
*P&I estimate	
Internally managed assets:	
Total DB	1,977
Total DC	971
Defined benefit asset mix:	
Stocks	39%
Fixed income	31%
Cash equivalents	23%
Real estate equity	5%
Other	2%
Defined contribution asset mix:	
Company stock	21%
Other stock	10%
Fixed income	13%
GICs/BICs	56%

BETHPAGE, N.Y. — Grumman Corp.'s total employee benefit assets decreased 2.2% to $3.101 billion from $3.17 billion a year earlier, according to *Pensions & Investments* estimates. The estimate is based on $3.14 billion the company reported as of Dec. 31, 1989. Defined benefit assets increased an estimated 0.9% during the same period, to $2.13 billion from $2.15 billion. Defined contribution assets were estimated to have decreased

Bottom 800 defined benefit asset mix

	1990	1989
Aggregate		
Domestic stock	40.9%	44.3%
Domestic fixed income	34.5	31.2
Cash	9.1	9.3
Real estate equity	4.8	4.0
Mortgages	0.9	1.1
GIC/BIC	3.8	4.1
Private Placements	0.3	0.1
Annuities	0.7	0.7
International equity	2.8	na
International fixed income	0.4	na
Venture capital	0.4	0.4
Oil/gas	0.1	0.1
LBOs	0.1	0.1
Other	1.2	1.4
Corporate		
Domestic stock	44.3%	47.5%
Domestic fixed income	29.8	27.0
Cash	9.4	9.4
Real estate equity	4.6	4.2
Mortgages	0.4	0.4
GIC/BIC	4.4	4.3
Private Placements	0.2	0.1
Annuities	0.9	0.8
International equity	3.5	na
International fixed income	0.4	na
Venture capital	0.6	0.6
Oil/gas	0.1	0.1
LBOs	0.1	0.1
Other	1.3	1.4
Public		
Domestic stock	35.7%	39.0%
Domestic fixed income	44.7	41.0
Cash	8.9	8.3
Real estate equity	5.0	3.8
Mortgages	1.7	2.1
GIC/BIC	0.3	1.6
Private Placements	0.1	0.2
Annuities	0.5	0.2
International equity	1.7	na
International fixed income	0.2	na
Venture capital	0.3	0.3
Oil/gas	0.0	0.0
LBOs	0.0	0.0
Other	0.9	1.3
Union		
Domestic stock	28.9%	34.6%
Domestic fixed income	42.7	35.8
Cash	9.2	11.9
Real estate equity	6.0	3.3
Mortgages	2.9	3.3
GIC/BIC	7.0	8.2
Private Placements	0.9	0.1
Annuities	0.6	1.0
International equity	0.2	na
International fixed income	0.2	na
Venture capital	0.1	0.1
Oil/gas	0.0	0.0
LBOs	0.0	0.0
Other	1.3	1.6

Bottom 800 defined contribution asset mix

	1990	1989
Aggregate		
Domestic stock	15.4%	18.6%
Company stock	24.5	23.0
Domestic fixed income	10.1	10.9
Cash	8.5	6.8
Real estate equity	1.2	0.6
Mortgages	0.2	0.1
Annuities	0.9	0.9
GIC/BIC	32.7	36.9
International equity	0.3	0.3
International fixed income	0.1	0.0
Alternative investments*	0.0	0.0
Other	6.1	1.9
Corporate		
Domestic stock	15.2%	18.8%
Company stock	27.1	26.2
Domestic fixed income	8.1	7.9
Cash	7.1	5.8
Real estate equity	1.0	0.6
Mortgages	0.0	0.0
Annuities	0.7	0.1
GIC/BIC	34.2	38.7
International equity	0.3	0.3
International fixed income	0.1	0.0
Alternative investments*	0.0	0.0
Other	6.2	1.6
Public		
Domestic stock	26.7%	26.0%
Domestic fixed income	23.1	21.1
Cash	11.7	10.4
Real estate equity	0.9	1.0
Mortgages	0.0	0.8
Annuities	6.8	3.9
GIC/BIC	21.8	26.0
International equity	1.3	0.0
International fixed income	0.0	0.0
Alternative investments*	0.0	0.3
Other	7.4	6.5
Union		
Domestic stock	12.8%	13.4%
Domestic fixed income	34.2	43.5
Cash	31.1	19.7
Real estate equity	2.4	0.9
Mortgages	3.4	0.4
Annuities	0.3	13.3
GIC/BIC	14.0	8.5
International equity	0.0	0.0
International fixed income	0.0	0.0
Alternative investments*	0.0	0.0
Other	1.8	0.3

*Composed of venture capital, oil and gas, LBOs and private placements

4.8%, to $971 million from $1.02 billion.

Real estate managers: CIGNA; Equitable; and Prudential.

The master trustee is Bank of New York.

The key person overseeing the investment management of the fund is W.R. Parmentier, assistant treasurer/investment manager.

GTE Corp.

	($ millions)
Total assets	11,825
Defined benefit	9,723
Thrift or savings	2,102
Employer DB contributions	na
Benefit payments	264
Employer DC contributions	67
Internally managed assets	
Total DB	2,623
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	60%
Fixed income	24%
Cash equivalents	15%
Real estate equity	1%
Defined contribution asset mix:	
Company stock	47%
Other stock	11%
Fixed income	1%
GICs/BICs	41%

STAMFORD, Conn. — As of Sept. 30, GTE Corp.'s total employee benefit assets decreased 4.8% to $11.825 billion from $12.423 billion a year earlier. Defined benefit assets decreased 8.9% during the same period, to $9.723 billion from $10.669 billion. Defined contribution assets increased 19.8%, to $2.102 billion from $1.754 billion.

Equity managers: Domestic — Acorn; Baker, Nye; Bankers Trust; Sanford Bernstein; BMI; Cashman, Farrell; Concord; Darien; Eagle; First Manhattan; First Pacific; Franklin Portfolio; Frontier; Geocapital; GTE Investment; Hotchkis and Wiley; Oppenheimer; Pacific Financial; Provident Investment; Rampart; Richter; Rosenberg Institutional; Donald Smith; and Weiss, Peck and Greer.

International — Bankers Trust; Baring; Grantham, Mayo, Van Otterloo; GTE Investment; J.P. Morgan; Mercator; Nikko; Philippe; Rowe Price-Fleming; TCW/Cursitor-Eaton; and Yamaichi.

Fixed-income managers: Domestic — Baring; Darien; Pacific; and Rampart.

International — Beutel, Goodman; Security Capital; and WorldInvest.

Real estate managers: AEW/State Street Bank; Citibank; and TCW.

Non-traditional managers: Chancellor; Chase Investors; Energy Investors; Forest Investment; GTE Investment; John Hancock; Manufacturers National; and TCW.

Bankers Trust is the master trustee and global custodian.

Key personnel overseeing the investment management of the fund are John B. Carroll, president of GTE Investment Management Corp., a subsidiary of GTE Corp.; T. Britton Harris IV, vice president-pension fund management; and Stephen Weidemann, vice president-fixed-income management.

H

Halliburton Co.

	($ millions)
Total assets	2,260
Total defined contribution	2,260
Profit-sharing	1,197
Other	1,062
Employer DC contributions	75
Internally managed assets	929
Hedging devices used:	
Stock options	
Bond options	
Defined contribution asset mix:	
Company stock	0%
Other stock	24%
Fixed income	21%
Cash equivalents	3%
GICs/BICs	45%
Real estate equity	1%

DALLAS — As of Sept. 30, Halliburton Co.'s total employee benefit assets decreased 0.4% to $2.26 billion from $2.27 billion a year earlier. All assets are defined contribution.

Equity managers: Domestic — Eagle; GAMCO; Husic; Lehman-Ark; Phoenix Investment; PIMCO; and Fayez Sarofim.

International — Boston Overseas; SBC; and Schroder Investment.

Fixed-income managers: Domestic — Lehman-Ark; Neuberger & Berman; and Sovran.

International — Putnam.

The master trustee and global custodian is State Street Bank; the investment consultant is SEI.

The key person overseeing investment management of the fund is Nathaniel H. Duffield, director-trust investments.

Employees Retirement System of the State of Hawaii

	($ millions)
Total assets*	4,119
Defined benefit	4,119
Employer DB contributions	13
Benefit payments	244
*as of June 30, 1990	
Internally managed assets	855
Hedging devices used:	
Stock options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	45%
Fixed income	31%
Cash equivalents	5%
Real estate equity	9%
Mortgages	9%
GICs/BICs	1%

HONOLULU — As of June 30, the Employees Retirement System of the State of Hawaii's total employee benefit assets increased 1.7% to $4.119 billion from $4.051 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Barrow, Hanley, Mewhinney & Strauss; Bradford & Marzec; Cadinha; Delaware Investment; Gunney & Denney; Hanson Investment; J.B. Havre; INVESCO; McCowan; and Denis Wong.

International — Daiwa International; Mellon Capital; Nikko; Nomura; and Schroder Capital.

Fixed-income managers: Domestic — Brinson; Lowe, Brokenbrough, Tierney, & Tattersall; PIMCO; Scudder, Stevens, & Clark; and Security Pacific.

International — ABD; Capital Management International; INVESCO MIM; Prudential; and Putnam.

Real estate managers: Aetna; BetaWest; CIGNA; Trammel Crow; John Hancock; Metropolitan Life; and Public Storage.

The master custodian and global custodian is Bank of New York; the investment consultants are Callan and SEI.

Key personnel overseeing the investment management of the fund are Stanley Siu, executive secretary; and David Shimabukuro, assistant secretary.

Hercules Inc.

	($ millions)
Total assets	1,600
Defined benefit	1,260
Total defined contribution	340
Thrift or savings	20
401(k)	320
Employer DB contributions	2
Benefit payments	111
Employer DC contributions	45
Hedging devices used:	
Stock options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	57.4%
Fixed income	28%
Cash equivalents	0.9%
Real estate equity	11%
GICs/BICs	2.7%

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Defined contribution asset mix:	
Company stock	12%
Other stock	8%
Cash equivalents	3%
GICs/BICs	77%

WILMINGTON, Del. — As of Sept. 30, Hercules Inc.'s total employee benefit assets decreased 8.7% to $1.6 billion from $1.752 billion a year earlier. Defined benefit assets decreased 10.8% during the same period, to $1.26 billion from $1.412 billion. Defined contribution assets remained the same at $340 million.

Equity managers: Domestic — Capital Guardian; Cooke & Bieler; Geewax Terker; Lazard Freres; Marvin & Palmer; Mellon Capital.

International — Fidelity Investments; J.P. Morgan; Marvin & Palmer; Warburg.

Fixed-income managers: Domestic — Mellon Capital; J.P. Morgan.

Real estate managers: Aetna; Equitable; Prudential.

GIC managers: Aetna; New England Life.

Cash manager: Bankers Trust.

The master trustee is Bankers Trust; the global custodian is Chase Manhattan; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are John R. Long, director-investments; and D. Robert O'Donnell, senior accounting specialist.

Honeywell Inc.

	($ millions)
Total assets	2,839
Defined benefit	1,952
401(k)	887
Employer DB contributions	33
Benefit payments	107
Employer DC contributions	na
Defined benefit asset mix:	
Stocks	43.4%
Fixed income	30.7%
Cash equivalents	2%
Real estate equity	10.1%
GICs/BICs	0.3%
Private placements	6.4%
Venture capital	3.9%
Oil & gas	3.2%
Defined contribution asset mix:	
Other stock	16.3%
GICs/BICs	72.1%
Other	11.6%

MINNEAPOLIS — As of Sept. 30, Honeywell Inc.'s total employee benefit assets decreased 2.4% to $2.839 billion from $2.909 billion a year earlier. Defined benefit assets decreased 6.9% during the same period, to $1.952 billion from $2.096 billion. Defined contribution assets increased 9.1%, to $887 million from $813 million.

Equity managers: Domestic — Alliance; Forstmann-Leff; GAMCO; Jundt Associates; and Mellon Capital.

International — Baring International and [illegible]S International.

Fixed-income managers: Domestic — Fischer, Francis, Trees & Watts.

International — Brinson.

Real estate managers: Aetna; AMB; Baring Institutional Realty; Brinson; Coldwell; State Street Bank; and TCW Asset.

Private placement managers: Bridge Capital; John Hancock; Olympus Private Placement Fund; and TCW Asset.

Oil & gas managers: Chase Investors; Cherokee Resources; First Reserve; and TCW Asset.

Venture capital managers: Advent International; Associated Venture; Brinson; Centennial; Concord; DLJ Growth; Dougery Jones & Wilder; Forstmann Little; Investech; Medical Innovations; Morgan, Holland; Narragansett; New Court Partners; Norton; O'Donnell & Masur; Recovery Management; Robertson Coleman; T.A. Associates; T. Rowe Associates; and Welsh, Carson.

GIC manager: Travelers.

The master trustee is Boston Safe; the global custodian is Chase; the investment consultant is Rogers, Casey.

Key personnel overseeing the investment management of the fund are Deborah W. Veverka, director-pension investments, and Jean T. Wangard, manager-pension investments.

National Benefit Fund for Hospital & Health Care Employees

	($ millions)
Total assets	1,932
Defined benefit	1,932
Employer DB contributions	66
Benefit payments	45
Defined benefit asset mix:	
Stocks	50.7%
Fixed income	12.2%
Cash equivalents	8.6%
Real estate equity	3.9%
GICs/BICs	24.6%

NEW YORK — As of Sept. 30, the National Benefit Fund For Hospital & Health Care Employees' total employee benefit assets decreased 13.8% to $1.932 billion from $2.241 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — FLA Asset; Lehman Ark; and Loomis, Sayles.

International — FLA; Lehman Ark; and Loomis, Sayles.

Fixed-income managers: Domestic — Amalgamated Bank; Criterion; PIMCO; WR Lazard; and State Street.

Real estate managers: Equitable and Prudential.

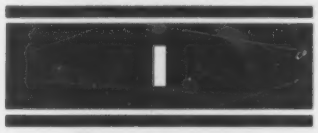
The master trustee and global custodian is Northern Trust Co.; the investment consultant is Marco Consulting Group.

The key person overseeing the investment management of the fund is Elly Tilson, executive director.

Hughes Aircraft Co.

	($ millions)
Total assets*	6,300
Defined benefit	4,200
Other	2,100
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
*From Money Market Directory	

LOS ANGELES — As of June 30, Hughes Aircraft Co.'s employee benefit assets totaled $6.3 billion, according to the 1991 Money Market Directory, a decrease of 4.1% from the $6.572 billion the company reported Sept. 30, 1989. Defined benefit assets decreased 6.7% during the same period, to $4.2 billion from $4.5 billion. Defined contribution assets, in a savings plan with a 401(k) feature, increased 1.4%, to $2.1 billion from $2.072 billion.



I.A.M. National Pension Fund

	($ millions)
Total assets	1,646
Defined benefit	1,642
Total defined contribution	4
Other	4
Employer DB contributions	69
Benefit payments	81
Employer DC contributions	2
Defined benefit asset mix:	
Stocks	48.2%
Fixed income	42.9%
Cash equivalents	8.9%
Defined contribution asset mix:	
Cash equivalents	100%

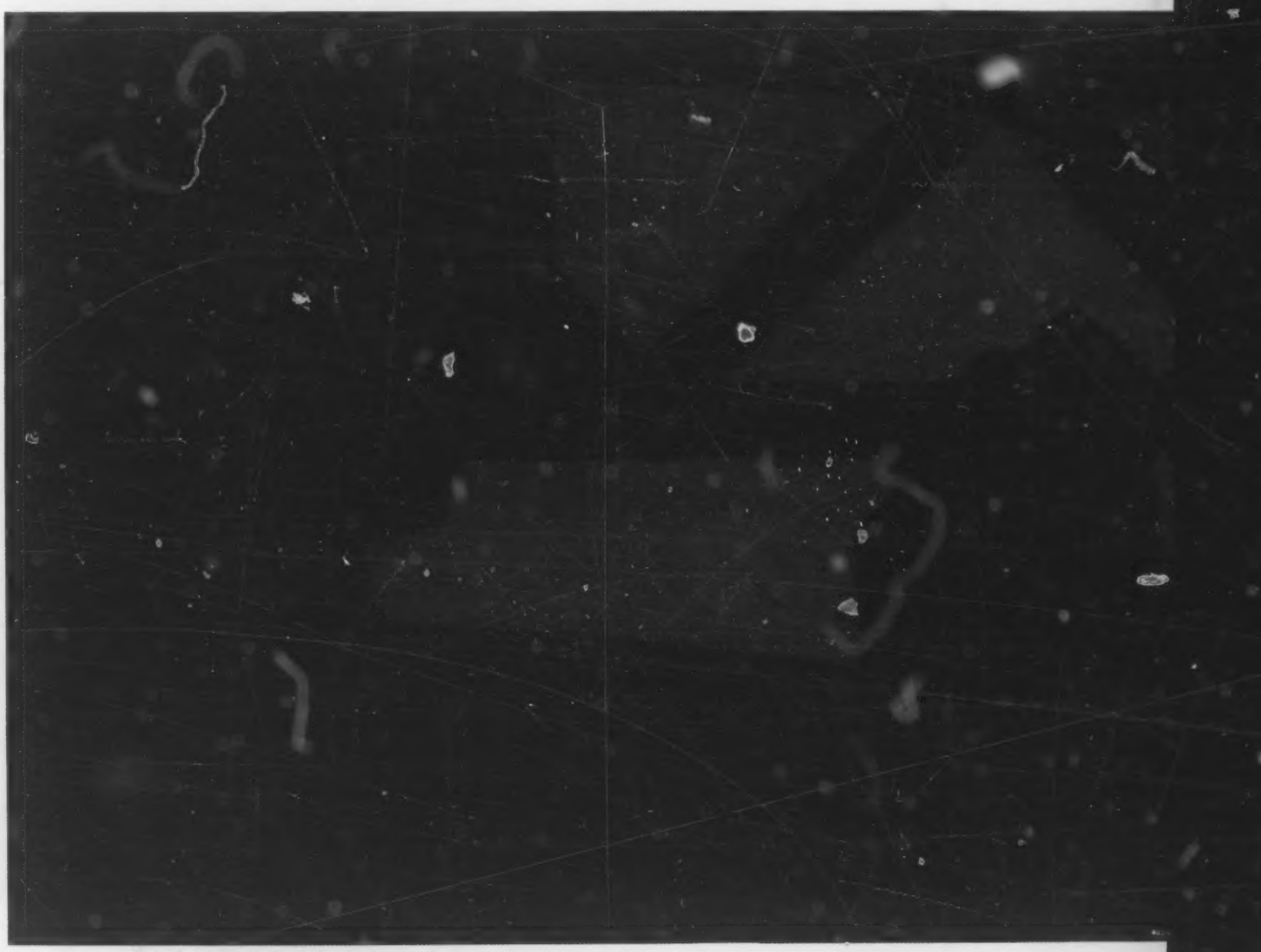
WASHINGTON — As of Sept. 30, the I.A.M. National Pension Fund's total employee benefit assets decreased 2.9% to $1.646 billion from $1.695 billion a year earlier. Defined benefit assets decreased 2.9% during the same period, to $1.642 billion from $1.693 billion. Defined contribution assets doubled to $4 million from $2 million.

Equity managers: Domestic — Dodge & Cox; Lazard Freres; State Street Bank; Stein Roe & Farnham.

Fixed-income managers: Domestic — Dodge & Cox; Lazard Freres; State Street; Stein Roe.

Cash manager: Payden & Rygel.

THE CREATION OF VALUE



The Creation of Value *by Douglas Fraser, Calgary. "The creation of value is the union of ideas and action," said the artist. "In my painting, an idea matures into a real-life application — it transcends the hypothetical and becomes tangible."*

The master trustee is State Street.

The board of trustees oversees investment management of the fund.

IBM Corp.

	($ millions)
Total assets	25,000
Defined benefit	21,200
401(k)	3,800
Employer DB contributions	0
Benefit payments	700
Employer DC contributions	115
Internally managed assets:	
Total DB	11,600
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	

STAMFORD, Conn. — As of Sept. 30, IBM Corp.'s total employee benefit assets decreased 3% to $25 billion from $25.775 billion a year earlier. Defined benefit assets decreased 5.8% during the same period, to $21.2 billion from $22.5 billion. Defined contribution assets increased 16%, to $3.8 billion from $3.275 billion.

Equity managers: Domestic — Alliance; Butler; Chancellor; Columbus Circle; Delaware; Dillon, Read; DFA; Fidelity; Forstmann Little; F.S. Equity; Independence; John Hancock; Lincoln Capital; NCM; Resource Investors; Sasco; State Street Bank; Warburg; and Wellington.

International — Acadian; Capital Guardian; DFA; DSI; HD International; Matuschka Moser; J.P. Morgan; Nomura; Oechsle; Rowe Price-Fleming; and State Street Bank.

Fixed-income managers: Domestic — BEA; Fischer, Francis, Trees & Watts; Hoisington; Lincoln Capital; Miller, Anderson & Sherrerd; and PIMCO.

International — Morgan Grenfell and WorldInvest.

Real estate managers: AEW; Cabot; Dreyfus; Equitable; Grubb & Ellis; Wells Fargo; and Yarmouth.

Chase Manhattan is the master trustee and global custodian; the investment consultant is Frank Russell.

Public Employees Retirement System of Idaho

	($ millions)
Total assets	1,637
Defined benefit	1,637
Employer DB contributions	97
Benefit payments	98
Hedging devices used:	
Stock options	
Bond options	
Defined benefit asset mix:	
Stocks	41.1%
Fixed income	38.2%
Cash equivalents	3.2%
Real estate equity	9.5%
Mortgages	8%

BOISE, Idaho — As of Sept. 30, the Public Employees Retirement System of Idaho's total employee benefit assets decreased 0.4% to $1.637 billion from $1.643 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Columbus Circle; Eaton Vance; Husic; Mellon Capital; Mountain Pacific; Newell; and Wellington.

International — Boston International; Rowe Price-Fleming; and Schroder Capital.

Fixed-income managers: Domestic — BEA; Sanford Bernstein; D.B. Fitzpatrick; and State Street Bank.

Real estate managers: Cabot, Cabot & Forbes; Equitable; LaSalle; Metropolitan Life; J.W. O'Connor; Prudential; and Sentinel.

The master custodian and global custodian is Mellon; the investment consultant is Dorn & Helliesen.

Key personnel overseeing the investment management of the fund are John F. Hart, chief investment officer; and Isabelle Fowler, senior research analyst.

Illinois Municipal Retirement Fund

	($ millions)
Total assets	4,239
Defined benefit	4,239
Employer contributions	203
Benefit payments	205
Internally managed assets	245
Hedging devices used:	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	46%
Fixed income	34.5%
Cash equivalents	5.8%
Real estate equity	10.8%
Mortgages	1%
Venture capital	1.9%

CHICAGO — As of Sept. 30, the Illinois Municipal Retirement Fund's total employee benefit assets decreased 2% to $4.239 billion from $4.326 billion on Aug. 31, 1989. All assets are defined benefit.

Equity managers: Domestic — ANB; Campbell, Cowperthwait; Dalton, Greiner, Hartman, Maher; DFA; Fidelity Management Trust; Frontier; Lincoln Capital; Provident Investment; and Wall Street Associates.

International — ANB; Baring; Nomura Capital; Schroder Capital; and TIMCO.

Fixed-income managers: Domestic — ANB; Criterion; Fidelity Management Trust; and Payden & Rygel.

International — Julius Baer.

Real estate managers: Equitable Real Estate; JMB; LaSalle Advisors; Piedmont Realty; RREEF; Sentinel Real Estate; and TCW Realty.

Venture capital managers: Abbott Capital; Brinson Partners; Larimer; and Oxford.

The master trustee is Northern Trust; the global custodian is Northern Trust-London; the investment consultants are William M. Mercer and Institutional Property Consultants.

Key personnel overseeing the investment management of the fund are Robert L. Cusma, executive director; Walter J. Koziol, director-investments; and Edward N. Sambol, investment manager.

Illinois State Board of Investment

	($ millions)
Total assets	3,045
Defined benefit	3,045
Employer DB contributions	115
Benefit payments	215
Internally managed assets	1,120
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	42%
Fixed income	40%
Cash equivalents	3%
Real estate equity	10%
Other	5%

CHICAGO — As of Sept. 30, the Illinois State Board of Investment's total employee benefit assets decreased 4% to $3.045 billion from $3.173 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Ariel; Cooke & Bieler; Disciplined; Fidelity Management; Lazard Freres; Lincoln Capital; Marshall Plan; Newbold's; Southeastern; TCW; and T-K Capital.

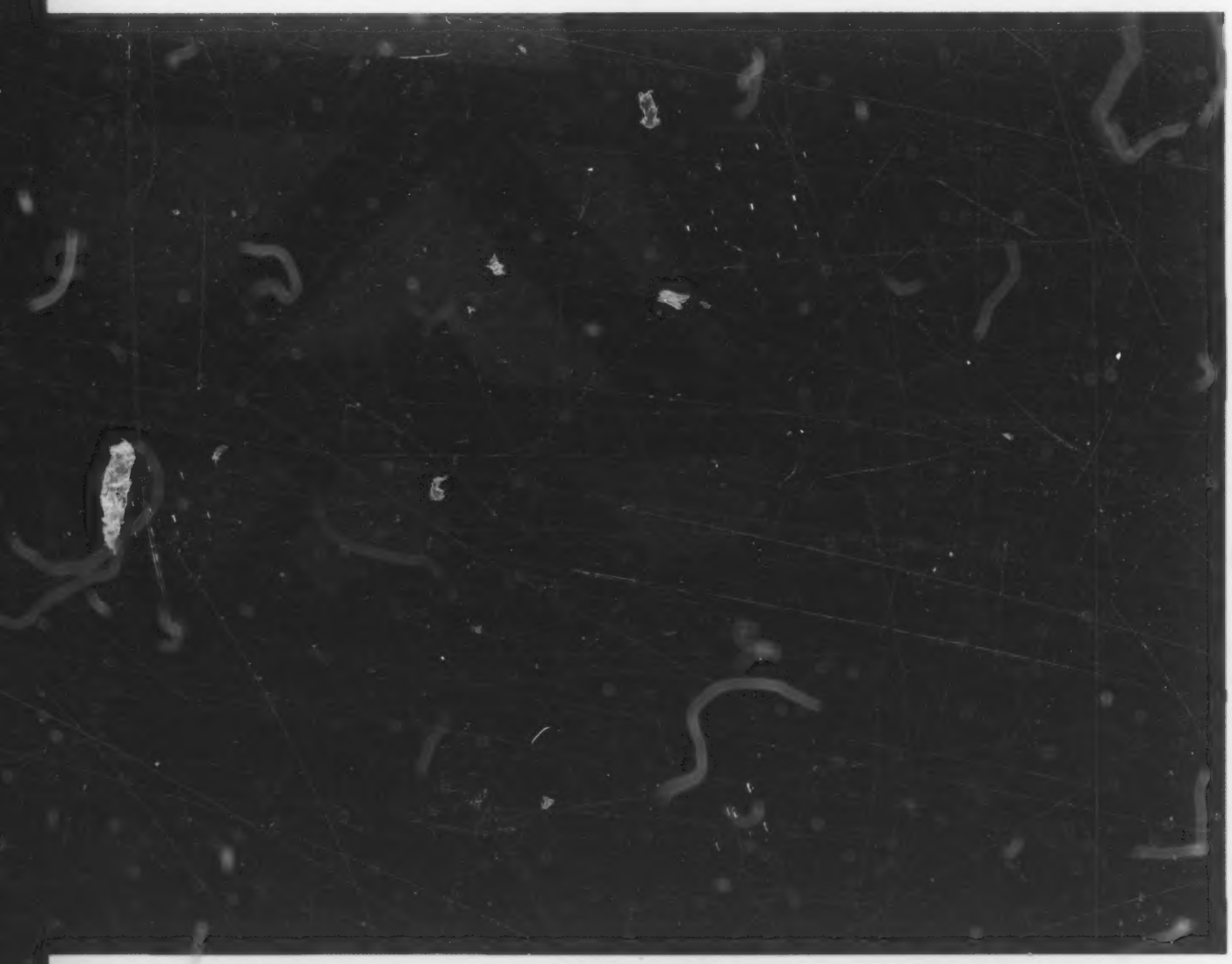
International — Acadian; Brinson; Candover; Globe Finlay; Hill Samuel Investment Advisers; TCW Asset; and Templeton.

Fixed-income managers: Domestic — Calamos; Delaware; Fidelity Management; and J.P. Morgan.

Real estate managers: Aetna; Brinson; Heitman; Investors Conduit, JMB; PSI; TCW; VMS Mortgage; and Zell/Merrill Lynch.

Northern Trust is the master custodian and global custodian; the investment consultant is Pension Consulting Alliance.

Key personnel overseeing the investment management of the fund are Gregory C. Nagle, director; Larry Darlington, fixed-income manager; and Scott Pape, equity manager.



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Illinois State Universities Retirement System

	($ millions)
Total assets*	3,959
Defined benefit	3,959
Employer DB contributions	113
Benefit payments	195
as of June 30, 1990	
Internally managed assets	22
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	58%
Fixed income	30%
Real estate equity	12%

CHAMPAIGN, Ill. — As of June 30, the Illinois State Universities Retirement System's total employee benefit assets increased 2.9% to $3.959 billion from $3.845 billion on Sept. 30, 1989. All assets are defined benefit.

Equity managers: Domestic — Batterymarch and Fayez Sarofim.

International — Wells Fargo-Nikko.

Fixed-income managers: Domestic — PIMCO and Wells Fargo-Nikko.

International — Wells Fargo-Nikko.

Real estate managers: Aetna; Equitable; JMB; and RREEF.

Other manager: PIMCO.

The master trustee is Northern Trust; the investment consultant is Ennis, Knupp.

Key personnel overseeing the investment management of the fund are Donald E. Hoffmeister, executive director; Kenneth E. Codlin, chief investment officer; and Jeanne Valcik, associate investment officer.

Teachers' Retirement System of the State of Illinois

	($ millions)
Total assets	8,175
Defined benefit	8,175
Employer contributions	293
Benefit payments	520
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	44%
Fixed income	36%
Cash equivalents	7%
Real estate equity	12%
Venture capital	1%

SPRINGFIELD, Ill. — As of Sept. 30, the Teachers' Retirement System of the State of Illinois' total employee benefit assets decreased 3.5% to $8.175 billion from $8.475 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — American National Bank, Chicago; Ariel; Brandywine; Brinson Partners; Cedar Hill; Chase Investors; Cozad; Eagle; Hotchkis and Wiley; Husic Capital; Keystone; Lazard Freres; Lehman Ark; Lincoln Capital; Morgan Stanley Asset; Munder; NCM Capital; Oppenheimer; RCM Capital; and Denis Wong.

International — Bankers Trust Investment; Burgess Capital; Daiwa International; Globe Finlay; HD International; Murray Johnstone; PCM; Scudder, Stevens & Clark; and State Street Bank.

Fixed-income managers: Domestic — Bear Stearns Asset; PIMCO; and State Street Bank.

International — Brinson Partners; J.P. Morgan Investment; and Putnam Advisory.

Real estate managers: Bear Stearns/Capital Associates; Bennett & Kahnweiler; Brinson Partners; Alex. Brown Kleinwort Benson; JMB; Jones Lang Wootton; MacFarlane; and TCW Realty.

Venture capital managers: Frontenac and Weiss Peck & Greer.

Foreign exchange managers: Matuschka and N.M. Rothschild.

Tactical asset allocation manager: Brinson Partners.

The master trustee is Harris Trust; the global custodians are Harris Trust and State Street Bank; the investment consultant is Callan Associates.

Key personnel overseeing the investment management of the fund are Fred Husmann, executive director, and William M. Stephens, chief investment officer.

Public Employees' Retirement Fund of Indiana

	($ millions)
Total assets*	3,104
Defined benefit	2,464
Total defined contribution	640
Employer DB contributions	175
Benefit payments	120
Employer DC contributions	0
as of June 30, 1990	
Defined benefit asset mix:	
Fixed income	92%
Cash equivalents	8%
Defined contribution asset mix:	
Fixed income	92%
Cash equivalents	8%

INDIANAPOLIS — As of June 30, The Public Employees' Retirement Fund of Indiana's total employee benefit assets increased 13.4% to $3.104 billion from $2.737 billion a year earlier.

Fixed-income managers: Domestic — Bank One Indianapolis; INB National Bank; Lehman-Ark; and Prime Capital Management.

The investment consultant is Performance Analytics.

Phillip N. Smith, director, oversees investment management of the fund.

The *P&I*/InterSec 300 will be published Aug. 5.

Top 200 defined benefit funds with assets in non-investment grade bonds

Fund	($ millions)
J.C. Penney	535
Textron	362
Allied-Signal	280
Pacific Telesis	250
Illinois State Board	160
Connecticut Trust Funds	150
Monsanto	127
Los Angeles Fire & Police	126
General Electric	100
State of Michigan	88
Owens-Illinois	77
Du Pont	71
San Francisco City/County	67
United Airlines	60
USX	60
Westinghouse Electric	55
Eastern Air Lines	53
Atlantic Richfield	33
Iowa Public Employees	30
Consolidated Natural Gas	19
Teamsters, Central States	18
Total	2,721

Indiana State Teachers' Retirement Fund

	($ millions)
Total assets	2,000
Defined contribution	2,000
Employer DC contributions	163
Defined contribution asset mix:	
Fixed-income	100%

INDIANAPOLIS — As of Sept. 30, the Indiana State Teachers' Retirement Fund's total employee benefit assets increased 17.6% to $2 billion from $1.7 billion a year earlier. All assets are in an annuity purchase plan.

Fixed-income managers: Domestic — Alliance; Bank One; Bank of New York; Baxter Capital; Indiana National Bank; Merchants Investment Counseling; and Todd Investment.

The master custodian is Indiana National Bank.

The key person overseeing the investment management of the fund is Robert Newland, investment officer.

Inland Steel Industries Inc.

	($ millions)
Total assets	1,848
Defined benefit	1,453
Total defined contribution	395
Employer DB contributions	0
Benefit payments	120
Employer DC contributions	11
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	46.5%
Fixed income	30%
Cash equivalents	8.8%
Real estate equity	10%
GICs/BICs	4.7%
Defined contribution asset mix:	
Company stock	8%
Other stock	4%
GICs/BICs	88%

CHICAGO — As of Sept. 30, Inland Steel Industries Inc.'s total employee benefit assets decreased 9.5% to $1.848 billion from $2.041 billion a year earlier. Defined benefit assets decreased 12.2% during the same period, to $1.453 billion from $1.655 billion. Defined contribution assets — a combined 401(k) and thrift/savings plan — increased 2.3% to $395 million from $386 million.

Equity managers: Domestic — Sanford Bernstein; Chancellor; Dalton, Greiner; INVESCO; Oppenheimer; Putnam Advisory; State Street Research; and Waddell & Reed.

International — Baring International; Brinson Partners; and Putnam International.

Fixed-income managers: Domestic — Lincoln.

Real estate managers: Cabot; Equitable; Grubb & Ellis; JMB; MIG; Prudential; and Zell/Merrill Lynch.

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The master trustee is Northern Trust; the investment consultant is DeMarche.

Key personnel overseeing the investment management of the fund are Richard Schutter, director-pension investment and administration; Lily May, manager-pension investment and administration; and Jay Dittus, treasurer.

International Paper Co.

	($ millions)
Total assets	2,673
Defined benefit	1,967
Defined contribution	706
Employer DB contribution	na
Benefit payments	na
Employer DC contributions	na

PURCHASE, N.Y. — As of Sept. 30, International Paper Co.'s total employee benefit assets decreased 1.3% to $2.673 billion from $2.709 billion July 31, 1989. Defined benefit assets decreased 6.3% during the same period, to $1.967 billion from $2.1 billion. Defined contribution assets increased 15.9%, to $706 million from $609 million.

Myra R. Drucker, director-trust investments, oversees investment management of the fund.

Iowa Public Employees Retirement System

	($ millions)
Total assets	4,916
Defined benefit	4,916
Employer DB contributions	148
Benefit payments	168
Internally managed assets	34
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	31%
Fixed income	46%
Cash equivalents	1%
Real estate equity	12%
Other	10%

DES MOINES, Iowa — As of Sept. 30, the Iowa Public Employees Retirement System's total employee benefit assets increased 0.3% to $4.916 billion from $4.9 billion. All assets are defined benefit.

Equity managers: Domestic — Capital Guardian; Mellon; RCM; and Wellington.

International — Hill Samuel; Nomura; Philippe; and Schroder.

Fixed-income managers: Domestic — Boston Co.; Loomis, Sayles; Mellon; Miller, Anderson & Sherrerd; and J.P. Morgan.

International — Loomis, Sayles; Miller, Anderson & Sherrerd; and J.P. Morgan.

Real estate managers: AEW; Copley; Heitman; and JMB.

Other managers: Allsop; Cable & Howse; Gibbons, Green; Golda, Thoma; KKR; Interven; Interwest; Invest America; LTOS; Matrix; Menlo; MW; Prime; Steinberg Lyman; Summit; TCW; WCAS.

The master custodian and global custodian is Boston Safe Deposit; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Dennis Jacobs, deputy administrator, and Larry Thompson, investment officer.

ITT Corp.

	($ millions)
Total assets	2,990
Defined benefit	1,449
Total defined contribution	1,541
Thrift or savings	842
ESOP	699
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Defined benefit asset mix:	
Stocks	58%
Fixed income	26%
Cash equivalents	8%
Real estate equity	8%
Defined contribution asset mix:	
Company stock	25%
Other stock	11%
Cash equivalents	1%
GICs/BICs	60%
Loans	3%

NEW YORK — As of Sept. 30, ITT Corp.'s total employee benefit assets increased 19.7% to $2.99 billion from $2.497 billion a year earlier. Defined benefit assets decreased 10.3% during the same period, to $1.449 billion from $1.615 billion. Defined contribution assets increased 74.7%, to $1.541 billion from $882 million.

Equity managers: Domestic — Alliance; American Fund; Barrow, Hanley, Mewhinney & Strauss; First Manhattan; GAMCO; Jennison; Northern Investment Management; State Street Research; and Verus Capital.

International — Alliance; Capital Guardian; and Lazard Freres.

Fixed-income managers: Domestic — Alliance; J.P. Morgan; and State Street Research.

International — Morgan International and WorldInvest.

Real estate managers: Coldwell Banker; Corporate Property Investors; Equitable; Metropolitan; and RREEF.

Other managers: Blackstone; Alex. Brown; Butler Capital; Corporate Partners; Harry Gray; Kohlberg & Co.; and KKR.

The master trustee is Northern Trust; the global custodian is Northern Trust-London.

Key personnel overseeing the investment management of the fund are Edwin J. Ehrlich, director-pension fund trusts; and Eileen C. Leahy, manager-pension fund trusts.

J

Johnson & Johnson

	($ millions)
Total assets	1,650
Defined benefit	1,100
401(k)	550
Employer DB contributions	0
Benefit payments	29
Employer DC contributions	30
Internally managed assets:	
Total DB	55
Defined benefit asset mix:	
Stocks	67%
Fixed income	26.7%
Real estate equity	5%
Venture capital	1.3%
Defined contribution asset mix:	
Other stock	27%
GICs/BICs	73%

NEW BRUNSWICK, N.J. — As of Sept. 30, Johnson & Johnson's total employee benefit assets increased 10% to $1.65 billion from $1.5 billion a year earlier. Defined benefit assets decreased 8.3% during the same period, to $1.1 billion from $1.2 billion. Defined contribution assets increased 83% to $550 million from $300 million.

The master trustee and global custodian in Bankers Trust.

Key personnel overseeing the investment management of the fund are H. Scott Snead, director of pensions, and William Raun, assistant director of pensions.

K

K mart Corp.

	($ millions)
Total assets	1,643
Defined benefit	984
Total defined contribution	659
Employer DB contributions	0
Benefit payments	35
Employer DC contributions	na
Internally managed assets:	
Total DB	351
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	57.4%
Fixed income	31.3%
Cash equivalents	0.5%
Real estate equity	4.3%
GICs/BICs	4.4%
Annuities	2.1%

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Defined contribution asset mix:	
Company stock	31.1%
Other stock	8.6%
GICs/BICs	60.3%

TROY, Mich. — As of Sept. 30, K mart Corp.'s total employee benefit assets decreased 7.4% to $1.643 billion from $1.775 billion a year earlier. Defined benefit assets decreased 9.2% during the same period, to $984 million from $1.084 billion. Defined contribution assets, in a savings/401(k) hybrid plan, decreased 4.6%, to $659 million from $691 million.

Equity managers: Domestic — Alliance; Avatar; Capital Guardian; DFA; Greaves Capital; NCM Capital; and Westridge.

Real estate managers: Equitec and JMB.

GIC manager: Equitable.

Annuity manager: John Hancock.

The master trustee is NBD Bank.

Key personnel overseeing the investment management of the fund are William F. Camp, manager-pension and savings plan investments; Jon Hartman, assistant treasurer; and John Steinbach, portfolio manager.

Kansas Public Employees Retirement System

	($ millions)
Total assets	3,751
Defined benefit	3,751
Employer DB contributions	101
Benefit payments	189
Internally managed assets	39
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	31%
Fixed income	32%
Cash equivalents	3%
Real estate equity	13%
International	12%
Direct placements	9%

TOPEKA, Kan. — As of Sept. 30, the Kansas Public Employees Retirement System's total employee benefit assets increased 1.6% to $3.751 billion from $3.692 billion All assets are defined benefit.

Equity managers: Domestic — Delaware; Loomis, Sayles; Market Research; Pilgrim, Baxter; and Provident.

International — Alliance and Nomura.

Fixed-income managers: Domestic — Loomis, Sayles; Peters, Gamm; and PIMCO.

International — Julius Baer.

Real estate managers: Lehndorff & Babson and O'Connor.

Other managers: Bankers Trust; Marine Midland; Payden & Rygel; and Reimer & Koger.

The master custodian is Commerce Bank & Trust; the global custodian is Bankers Trust; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Tom Hamill, chairman, and Marshall Crowther, executive secretary.

Kentucky Retirement Systems

	($ millions)
Total assets	3,300
Defined benefit	3,300
Employer DB contributions	154
Benefit payments	152
Internally managed assets	1,501
Defined benefit asset mix:	
Stocks	45%
Fixed income	24%
Cash equivalents	19%
Real estate equity	5%
Mortgages	7%

FRANKFORT, Ky. — As of Sept. 30, the Kentucky Retirement Systems' total employee benefit assets increased 3.1% to $3.3 billion from $3.2 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Investment Advisers and Investment Counselors of Maryland.

Fixed-income managers: Domestic — T. Rowe Price and National Asset Management.

Real estate managers: Heitman; TCW Realty; and Yarmouth.

The master custodian is Farmers Bank & Capital Trust; the investment consultant is Mercer.

The key person overseeing the investment management of the fund is Marlene O. Castle, director of investment.

Kentucky Teachers' Retirement System

	($ millions)
Total assets	3,678
Defined benefit	3,678
Employer DB contributions	193
Benefit payments	204
Internally managed assets	611
Defined benefit asset mix:	
Stocks	24%
Fixed income	59%
Cash equivalents	13%
Real estate equity	1%
Mortgages	3%

FRANKFORT, Ky. — As of Sept. 30, the Kentucky Teachers' Retirement System's total employee benefit assets increased 6.3% to $3.678 billion from $3.461 billion a year earlier. All assets are in defined benefit plans.

Equity managers: Domestic — INVESCO and Todd Investment.

Fixed-income managers: Domestic — National Asset and Todd Investment.

The master custodian is Farmers Bank & Capital Trust.

Key personnel overseeing the investment management of the fund are Pat N. Miller, executive secretary; Stuart A. Reagan, deputy executive secretary; and Paul L. Yancey, investment analyst.

Pensions & Investments' annual directory of real estate investment managers will run Sept. 16.

L

Eli Lilly and Co.

	($ millions)
Total assets*	2,670
Defined benefit	1,402
401(k)	1,268
Employer DB contributions	42
Benefit payments	59
Employer DC contributions	34
*as of June 30, 1990	
Internally managed assets:	
Total DC	355
Defined benefit asset mix:	
Stocks	67%
Fixed income	19%
Cash equivalents	9%
Real estate equity	5%
Defined contribution asset mix:	
Company stock	63%
Other stock	8%
Fixed income	1%
GICs/BICs	28%

INDIANAPOLIS — As of June 30, Eli Lilly and Co.'s total employee benefit assets increased 9.8% to $2.67 billion from $2.432 billion a year earlier. Defined benefit assets decreased 0.6% during the same period, to $1.402 billion from $1.41 billion. Defined contribution assets increased 24.1%, to $1.268 billion from $1.022 billion.

Equity managers: Domestic — Ardsley; Capital Guardian; Mellon Capital; Nikko; Reams; and United Capital.

Real estate managers: GE and JMB.

The master trustee is Northern Trust.

Key personnel overseeing the investment management of the fund are Frederick W. Ruebeck, director-investments administration; Karen L. Hardwick, adviser-pension plan; and Michael W. Neal, adviser-savings plan.

Top 200 funds with defined contribution assets in international investments
($ millions)

Fund	Total	Equities	Bonds	Other
TIAA-CREF	4,242	4,000	242	0
Bechtel Power	361	215	146	0
American Stores	222	197	0	25
American Airlines	110	110	0	0
Trans World Airlines	108	108	0	0
Sears, Roebuck	93	93	0	0
Halliburton	82	80	2	0
Southern Baptist	70	41	29	0
Motorola	61	61	0	0
Evangelical Lutheran	44	44	0	0
Citibank	36	36	0	0
Xerox	23	23	0	0
United Methodist Church	9	9	0	0
Procter & Gamble	5	5	0	0
Total	5,406	5,022	419	25

Lockheed Corp.

	($ millions)
Total assets*	7,963
Defined benefit	5,294
Thrift or savings	2,669
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
*P&I estimate	
Defined benefit asset mix:	
Stocks	53%
Fixed income	27%
Cash equivalents	11%
Real estate equity	6%
Other	3%

CALABASAS, Calif. — As of Sept. 30, *Pensions & Investments* estimates Lockheed Corp.'s total employee benefit assets at $7.963 billion. That estimate is based on the $8.581 billion the company said it had as of Dec. 31, 1989 and represents a 10.8% decrease from an estimated $8.926 billion a year earlier. Defined benefits assets declined 15.3% during the same period to an estimated $5.294 billion, from an estimated $6.247 billion. Defined contribution assets decreased 0.4% to an estimated $2.669 billion from an estimated $2.679 billion.

Managers: Alliance; Anhalt/O'Connell; Bankers Trust; Batterymarch; Capital Guardian; Chancellor; Chase Investors; Delaware Investment; DSI; First Interstate, Washington; Hotchkis and Wiley; Investment Research; Karsten; Lombard Odier; Mellon Bank; Mitchell Hutchins; J.P. Morgan; Pacific Financial; Payden & Rygel; RREEF; Fayez Sarofim; SBC; Security Pacific; Smith Barney; TCW Asset; Western Asset; Westwood; and Wright Investors.

The master trustee and global custodian is Bankers Trust; the investment consultant is BT Consulting.

Key personnel overseeing the investment management of the fund are George C. Weintz, investment coun-

Top 200 funds with defined benefit assets in international investments
($ millions)

Fund	Total	Equities	Bonds	Other
California Employees	5,700	3,700	2,000	0
United Nations	4,568	1,792	2,169	607
GTE	1,916	1,322	594	0
AT&T	1,879	1,879	0	0
General Electric	1,638	1,592	46	0
Pacific Telesis	1,601	1,601	0	0
Connecticut Trust Funds	1,156	753	403	0
NYNEX	1,126	943	183	0
Colorado Employees	1,109	1,109	0	0
Oregon Employes	1,100	1,100	0	0
Ameritech	1,085	1,060	25	0
Los Angeles County	1,041	1,041	0	0
Illinois Teachers	1,033	573	460	0
New York City	1,023	647	376	0
Wisconsin State Board	1,012	540	472	0
United Technologies	820	710	110	0
World Bank	776	457	319	0
Prudential Insurance	705	386	319	0
Tennessee Consolidated	685	410	275	0
Hawaii Employees	679	557	122	0
San Francisco City/County	678	247	431	0
Atlantic Richfield	575	523	52	0
Illinois Municipal	505	384	121	0
Arizona State	457	457	0	0
Kansas Employees	422	334	88	0
Caterpillar	402	402	0	0
Philip Morris	385	385	0	0
Texas Teachers	379	379	0	0
Pacific Gas & Electric	365	365	0	0
Owens-Illinois	357	298	59	0
Delta Air Lines	350	350	0	0
Du Pont	343	309	34	0
Exxon	341	250	9	82
Illinois State Universities	332	332	0	0
USX	330	190	140	0
Alaska State	321	321	0	0
Pennsylvania School	315	75	240	0
Southwestern Bell	310	310	0	0
TRW	297	182	115	0
ITT	289	189	100	0
Presbyterian Church	265	200	65	0
Allied-Signal	258	258	0	0
North Carolina	258	258	0	0
Illinois State Board	248	218	30	0
Sears, Roebuck	240	240	0	0
Xerox	231	231	0	0
Monsanto	222	222	0	0
Pennsylvania Employes	222	197	25	0
Chevron	219	105	0	114
GenCorp	207	100	107	0
University of California	206	35	171	0
S. New England Telephone	203	203	0	0
American Airlines	200	150	50	0
S. California Edison	199	174	25	0
Honeywell	192	114	78	0
Amoco	185	185	0	0
Travelers	183	157	26	0
Unisys	181	181	0	0
Hercules	171	171	0	0
BP America	144	144	0	0
Westinghouse Electric	140	140	0	0
Minnesota Mining & Mfg.	139	117	22	0
Inland Steel	134	134	0	0
Chicago Police	130	91	39	0
Iowa Employees	130	122	8	0
Nat'l Rural Electric Co-op	126	126	0	0
CIGNA	122	91	31	0
ALCOA	116	56	60	0
J.C. Penney	108	108	0	0
Chicago Municipal	101	93	8	0
Delaware State	100	73	27	0
United Airlines	100	100	0	0
Maine State	93	93	0	0
Southern Baptist	90	42	48	0
Nevada	88	88	0	0
Chrysler	87	87	0	0
Virginia Retirement	87	87	0	0
FPL Group	83	83	0	0
PPG Industries	79	79	0	0
Aetna	77	77	0	0
Deere	75	75	0	0
New York State & Local	73	73	0	0
Los Angeles Fire & Police	65	65	0	0
Commonwealth Edison	64	31	33	0
Idaho Employees	62	62	0	0
Amoco	61	61	0	0
Mississippi Employees	61	61	0	0
Tenneco	59	59	0	0
Bakery & Confectionery	55	55	0	0
Rhode Island	41	41	0	0
Equitable Life	37	37	0	0
Episcopal Church	36	0	0	36
Los Angeles City	35	35	0	0
Mobil Oil	35	35	0	0
Motorola	31	31	0	0
Eastern Air Lines	30	30	0	0
New York Life	27	21	0	6
Bethlehem Steel	25	25	0	0
Florida State Board	17	17	0	0
Hospital/Health Care	15	15	0	0
General Dynamics	14	14	0	0
Textron	12	0	0	12
United Methodist Church	10	10	0	0
American Stores	4	3	0	1
Total	46,713	34,740	16,115	858

sel, and Sheldon J. Lieberman, trust fund performance manager.

Los Angeles City Employees' Retirement System

	($ millions)
Total assets	2,620
Defined benefit	2,620
Employer DB contributions	146
Benefit payments	156
Internally managed assets	300
Defined benefit asset mix:	
Stocks	29%
Fixed income	54%
Cash equivalents	15%
Real estate equity	2%

LOS ANGELES — As of Sept. 30, the Los Angeles City Employees' Retirement System's total employee benefit assets increased [illegible]% to $2.62 billion from $2.599 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Ariel; Bankers Trust; Loomis, Sayles; and Security Pacific.

International — Axe-Core.

Fixed-income managers: Domestic — W.R. Lazard; Lincoln Capital; and Loomis, Sayles.

Real estate managers: AEW; LaSalle; Lehndorff & Babson; and O'Connor Group.

Other manager. Bailard, Biehl and Kaiser.

The master custodian is Bank of New York; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Jerry F. Bardwell, manager-secretary; Oscar Peters, assistant manager; and Daniel P. Gallagher, investment officer.

Los Angeles County Employees' Retirement Association

	($ millions)
Total assets*	10,362
Defined benefit	10,362
Employer DB contributions	380
Benefit payments	442
*as of June 30, 1990	
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	49%
Fixed income	42%
Cash equivalents	2%
Real estate equity	4%
Mortgages	1%
Venture capital	2%

LOS ANGELES — As of June 30, the Los Angeles County Employees' Retirement Association's total employee benefit assets increased 10.7% to $10.362 billion from $9.359 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Capital Guardian; INVESCO; Loomis, Sayles; Morgan Stanley Asset; Pilgrim, Baxter, Grieg; Putnam Advisory; Security Pacific Investment; Stein Roe; TSA Capital; and Weiss, Peck & Greer.

International — Brown Brothers Harriman; Capital Guardian; Chase Investors; Daiwa; Morgan Grenfell; and Warburg.

Fixed-income managers: Bradford & Marvin; Brown Brothers; Capital Guardian; Criterion; MacKay-Shields; Massachusetts Financial; and J.P. Morgan.

Real estate managers: Trammel Crow; Equitable; Goldman, Sachs; Heitman; JMB; Lehndorff & Babson; Prudential; Public Storage; RREEF; Sentinel; Shurgard; and TCW Realty.

Cash manager: Discount Corp. of New York.

Venture capital managers: Copley Venture; GKH Partners; Prudential Venture Capital; Syndicated Communications Partners II; TA Communications; and E.M. Warburg Pincus.

The master custodian is Security Pacific; the global custodian is Chase Manhattan; the investment consultants are Callan and Frank Russell.

Key personnel overseeing the investment management of the fund are Charles F. Conrad, retirement administrator, and Marsha Richter, assistant retirement administrator.

Los Angeles Fire & Police Pension System

	($ millions)
Total assets	3,459
Defined benefit	3,459
Employer DB contributions	346
Benefit payments	250
Internally managed assets	138
Defined benefit asset mix:	
Stocks	58.1%
Fixed income	32%
Cash equivalents	4%
Real estate equity	5.9%

LOS ANGELES — As of Sept. 30, the Los Angeles Fire & Police Pension System's total employee benefit assets decreased 0.5% to $3.459 billion from $3.477 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Amerindo; Balch Hardy; BMI;

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Frontier; Husic; Loomis, Sayles; MCO; Oppenheimer; Security Pacific; and Target.

International — Globe Finlay; Nomura; and Oechsle.

Fixed-income managers: Domestic — Boston Co.; Cypress; Magten; and Security Pacific.

Real estate managers: Boston Co.; Equitable; JMB; Prudential; and Sentinel.

The master custodian is Bankers Trust; the investment consultant is Wyatt.

Key personnel overseeing the investment management of the fund are Gary Mattingly, general manager; Allan E. Moore, assistant general manager; and Dennis R. Sugi[illegible], chief investment officer.

Los Angeles Department of Water & Power Employees' Retirement Plan

	($ millions)
Total assets	1,850
Defined benefit	1,650
Employer DB contributions	121
Benefit payments	120
Internally managed assets	162
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	36%
Fixed income	56%
Cash equivalents	8%

LOS ANGELES — As of Sept. 30, the Los Angeles Department of Water & Power Employees' Retirement Plan's total employee benefit assets increased 2.8% to $1.85 billion from $1.8 billion as of June 30, 1989. All assets are defined benefit.

Equity managers: Domestic — Boston Co.; Merus Capital; and TCW Asset.

Fixed-income managers: Domestic — Boston Co.; Merus Capital; and TCW Asset.

The master trustee is Security Pacific; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Richard W. Goss, retirement plan manager, and Kathleen L. Thornton, assistant retirement plan manager.

Louisiana State Employees' Retirement System

	($ millions)
Total assets	2,234
Defined benefit	2,234
Employer DB contributions	94
Benefit payments	234
Internally managed assets	518
Defined benefit asset mix:	
Stocks	30%
Fixed income	66.5%
Cash equivalents	1%
Real estate equity	2.5%

BATON ROUGE, La. — As of Sept. 30, the Louisiana State Employees' Retirement System's total employee benefit assets decreased 0.7% to $2.234 billion from $2.25 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Amerindo; Boston Co.; Eagle; Merus; and Schaenen Wood.

Fixed-income managers: Domestic — Denver Investment; Duff & Phelps; INVESCO; and Mitchell Hutchins.

Real estate managers: Equitable; JMB; Metropolitan Life; and PSI.

The master custodian is Bank of New York for bonds and Custodial Trust for equities; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Vernon Strickland, chief investment officer; Nick Montagnino, investment officer II; and Calla McManus, investment officer II.

Teachers' Retirement System of Louisiana

	($ millions)
Total assets	3,457
Defined benefit	3,457
Employer DB contributions	349
Benefit payments	69
Internally managed assets	503
Defined benefit asset mix:	
Stocks	35%
Fixed income	55%
Cash equivalents	10%

BATON ROUGE, La. — As of Sept. 30, the Teachers' Retirement System of Louisiana's total employee benefit assets increased 5.9% to $3.457 billion from $3.265 billion as of June 30, 1989. All assets are defined benefit.

Equity managers: Domestic — Boston Co.; Eagle; Harris, Bretall; INVESCO; Palley-Needelman; Smith Barney; and Sun Bank.

Fixed-income managers: Domestic — Boatmen's; Criterion; Hibernia; Kemper; Morgan Stanley; and Scudder, Stevens & Clark.

The master custodian is City National Bank of Baton Rouge; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are James P. Hadley, director, and Jennifer Netterville, investment officer.

M

Maine State Retirement System

	($ millions)
Total assets	1,837
Defined benefit	1,837
Employer DB contributions	218
Benefit payments	171
Defined benefit asset mix:	
Stocks	49%
Fixed income	35%
Cash equivalents	11%
Real estate equity	3%
Other	2%

AUGUSTA, Maine — As of Sept. 30, the Maine State Retirement System's total employee benefit assets increased 2.1% to $1.837 billion from $1.8 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Columbus Circle; Dalton, Greiner, Hartman, Maher; Gouws Capital; Lehman Ark; and PanAgora.

International — Bankers Trust and State Street Bank.

Fixed-income managers: Domestic — Alliance; Boston Safe; Morgan Guaranty; PanAgora; and Putnam.

Real estate managers: PCA.

Other managers: First Reserve Energy.

The master custodian is Boston Safe Deposit; the global custodians are Bankers Trust and State Street; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Claude Perrier, executive director, and William Ross, investment accounting coordinator.

Martin Marietta Corp.

	($ millions)
Total assets	3,300
Defined benefit	2,248
Total defined contribution	1,052
Employer DB contributions	108
Benefit payments	98
Employer DC contributions	16
Internally managed assets:	

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Los Angeles

Top 200 funds with assets in real estate equity

Defined benefit

Fund	($ millions)
California Employees	5,100
AT&T	4,279
General Electric	2,308
Ohio State Teachers	2,200
California State Teachers	1,524
Ameritech	1,369
Connecticut Trust Funds	1,303
State of Michigan	1,270
Washington State Board	1,224
NYNEX	1,207
New York State & Local	970
Ohio Public Employees	958
Illinois Teachers	946
Ford Motor	900
Pennsylvania Employes	869
Florida State Board	868
Pacific Telesis	835
Teamsters, Western	788
New York State Teachers	743
Wisconsin State Board	692
Southwestern Bell	654
Iowa Employees	594
Pennsylvania School	578
Prudential Insurance	552
Colorado Employees	542
Oregon Employes	537
Westinghouse Electric	509
Minnesota State Board	485
Illinois State Universities	469
Kansas Employees	467
Illinois Municipal	458
Virginia Retirement	433
United Technologies	420
Allied-Signal	396
Los Angeles County	388
Chevron	387
Metropolitan Life	385
Exxon	356
Hawaii Employees	354
Ohio School Employees	334
Unisys	334
Illinois State Board	320
Utah State	316
Pacific Gas & Electric	311
Nevada Employees	294
Monsanto	283
Boilermaker-Blacksmith	255
Nat'l Electrical Contractors	255
Maryland State	251
Alaska State	247
United Nations	240
Xerox	238
Ohio Police & Firemen	236
USX	230
Presbyterian Church	225
Caterpillar	217
San Francisco City/County	209
North Carolina	208
Honeywell	196
Atlantic Richfield	194
Textron	189
Minnesota Mining & Mfg.	180
World Bank	178
Owens-Illinois	171
Idaho Employees	156
Chicago Police	155
UMWA	155
Kentucky Retirement	150
United Airlines	150
Inland Steel	146
Hercules	139
Chrysler	136
Eastern Air Lines	136
ITT	124
GTE	119
Citibank	117
Grumman	117
Sears, Roebuck	113
BP America	111
Amoco	110
Philip Morris	110
Los Angeles Fire & Police	107
J.C. Penney	106
S. New England Telephone	106
Delta Air Lines	105
S. California UFCW	101
Chicago Municipal	100
Rhode Island	98
FPL Group	97
Aetna	96
CIGNA	91
Equitable Life	84
Du Pont	79
Hospital/Health Care	77
United Methodist Church	74
Deere	72
Eli Lilly	70
S. California Edison	69
Travelers	65
ALCOA	60
Union Carbide	60
Operating Engineers	59
Los Angeles City	58
Louisiana Employees	55
Johnson & Johnson	54
Maine State	53
Anheuser-Busch	51
GenCorp	45
Georgia-Pacific	43
K mart	42
Kentucky Teachers	38
Alabama Retirement	35
Phillips Petroleum	30
New York Life	25
Trans World Airlines	21
Southern Baptist	19
American Electric Power	16
Delaware State	13
Raytheon	12
United Parcel Service	12
Teamsters, Central States	11
New Mexico Employees	5
Armco	2
General Dynamics	2
Georgia Teachers	2
Total	**50,062**

Defined contribution

Fund	($ millions)
TIAA-CREF	4,600
Trans World Airlines	93
Bechtel Power	83
American Stores	77
United Methodist Church	61
United Parcel Service	35
Halliburton	24
Xerox	24
Evangelical Lutheran	7
Equitable Life	4
Total	**5,008**

Total DB	967
Defined benefit asset mix:	
Stocks	20%
Fixed income	30%
Cash equivalents	50%
Defined contribution asset mix:	
Company stock	12%
Other stock	20%
Cash equivalents	52%
GICs/BICs	16%

BETHESDA, Md. — As of Sept. 30, Martin Marietta Corp.'s total employee benefit assets increased 3.1% to $3.3 billion from $3.201 billion a year earlier. Defined benefit assets increased 2.9% during the same period, to $2.248 billion from $2.184 billion. Defined contribution assets, which are in a profit-sharing plan with a 401(k) feature, increased 3.4%, to $1.052 billion from $1.017 billion.

Equity managers: Domestic — Breau Capital; Capital Guardian; Invista Capital; Pioneering Management; State Street Research; and Robert E. Torray.

Fixed-income managers: Domestic — T. Rowe Price.

The master trustee and global custodian is Bankers Trust; the investment consultant is EAI/Investment Management Controls.

Key personnel overseeing the investment management of the fund are Wayne H. Shaner, assistant treasurer-pension investments; Shawn M. Hendon, director-pension investments; and Wendy J. Thomson, administrator-pension investments.

Maryland State Retirement and Pension Systems

	($ millions)
Total assets	10,761
Defined benefit	10,761
Employer DB contributions	600
Benefit payments	54
Internally managed assets	7,457
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	28.5%
Fixed income	66.4%
Cash equivalents	2.7%
Real estate equity	2.3%
Mortgages	0.1%

BALTIMORE — As of Sept. 30, the Maryland State Retirement and Pension Systems' total employee benefit assets decreased 2.7% to $10.761 billion from $11.065 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Bankers Trust; Capital Guardian; DFA; Hagler, Mastrovita & Hewitt; Investment Counselors, Maryland; Scudder, Stevens & Clark; and Wellington Trust.

Fixed-income managers: Domestic — Investment Counselors, Maryland; Mercantile Safe; PIMCO; Progress Investment; and Standish, Ayer & Wood.

Real estate managers: CIGNA; Copley; J.P. Morgan; and Sentinel.

Key personnel overseeing the investment management of the fund are Howard J. France, chief investment officer; Lawrence J. Bach, director-passive management; Arthur M. Lynch Jr., director-actively managed assets; and Victoria Willard, director-cash management.

Massachusetts Pension Reserves Investment Management Board

	($ millions)
Total assets	2,700
Internally managed assets	20
Asset mix:	
Stocks	53.8%
Fixed income	25.9%
Cash equivalents	1%
Real estate equity	14.4%
Global	1.7%
Other	3.2%

BOSTON — As of Sept. 30, the Massachusetts Pension Reserves Investment Management Board's total assets decreased 3.3% to $2.7 billion from $2.791 billion a year earlier.

Equity managers: Domestic — Alliance; Bear Stearns; Lazard Freres; PanAgora; Trinity; and United States Trust.

International — Acadian; Baring International; Capital Guardian; Daiwa; Emerging Markets Management; GE Investments; HD International; Nomura; Oechsle; Scudder, Stevens & Clark; and State Street Bank.

Global — TCW Global.

Fixed-income managers: Domestic — AEW/Worcester; Equitable Capital; Fidelity Management; W.R. Huff; Lehman Ark; One Federal Asset; PIMCO; Putnam Advisory; Standish, Ayer & Wood; and TCW.

International — Baring International and N.M. Rothschild International.

Real estate managers: Domestic — Advent Realty; AEW; Boston Financial Group; Copley; FNB Boston; John Hancock; Heitman; INVESCO; JMB; Massachusetts Mutual; and TCW.

International — JMB.

Venture capital: Domestic — Commonwealth Bioventures; Davis Venture Partners; Golder, Thoma & Cressey; John Hancock; Morgan Holland; M.T.D.C.; S.C.V. Partners; TA Associates; Venture Capital of New England; and Vista.

International — Advent International; APA Ventures; and John Hancock International.

Special equity managers: Domestic — Boston Ventures; Forstmann, Little; INVEXCO; Joseph, Littlejohn & Levy; KKR; Thomas H. Lee; Smith Offshore; and Weintraub.

International — Advent; MMG Patricoff; and Schroder UK.

The master custodian and global custodian is State Street Bank; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Paul F. Quirk, executive director; Elizabeth A. McLaughlin, director of finances; and Philip D. Kett, chief investment officer.

P&I's annual Managers Scoreboard will be published in the Feb. 4 issue.

Commonwealth of Massachusetts Teachers' and Employees' Pension Fund

	($ millions)
Total assets*	6,650
Defined benefit	6,650
Employer DB contributions	1,121
Benefit payments	na

**from Money Market Directory*

BOSTON — As of June 30, the Commonwealth of Massachusetts Teachers' and Employees' Pension Fund's total employee benefit assets were $6.65 billion, the same as the previous year, according to the Money Market Directory. All assets are defined benefit.

McDonnell Douglas Corp.

	($ millions)
Total assets*	7,023
Defined benefit	5,430
Total defined contribution	1,593
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
**P&I estimate*	

ST. LOUIS — As of Sept. 30, *Pensions & Investments* estimates McDonnell Douglas Corp.'s total employee benefit assets decreased 7.5% to $7.023 billion from the $7.589 billion the company reported a year earlier. Defined benefit assets decreased an estimated 8.1% during the same period, to $5.43 billion from $5.911 billion. Defined contribution assets decreased 5.1%, to an estimated $1.593 billion from $1.678 billion.

The key person overseeing the investment management of the fund is David Hammerstein, director-retirement funds management.

PIPER and PIPER+ annual rankings will be published Feb. 18.

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Metropolitan Life Insurance

($ millions)	
Total assets	3,395
Defined benefit	2,403
Thrift or savings	992
Employer DB contributions	0
Benefit payments	137
Employer DC contributions	33
Internally managed assets:	
Total DB	2,403
Total DC	992
Defined benefit asset mix:	
Stocks	31%
Fixed income	53%
Real estate equity	16%
Defined contribution asset mix:	
Other stock	19%
Fixed income	80%
Other	1%

NEW YORK — As of Sept. 30, Metropolitan Life Insurance Co.'s total employee benefit assets were virtually unchanged at $3.395 billion compared with $3.393 billion a year earlier. Defined benefit assets declined 1.8% during the same period, to $2.403 billion from $2.446 billion. Defined contribution assets increased 4.8% to $992 million from $947 million. All assets are managed internally.

State of Michigan Retirement Systems

($ millions)	
Total assets	17,268
Defined benefit	17,268
Employer DB contributions	873
Benefit payments	1,101
Internally managed assets	16,345
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	37%
Fixed income	31%
Cash equivalents	15%
Real estate equity	7%
Mortgages	6%
Other	4%

LANSING, Mich. — As of Sept. 30, the State of Michigan Retirement Systems' total assets decreased 3.8% to $17.268 billion from $17.948 billion a year earlier. All assets are defined benefit.

Real estate managers: AEW; Copley; Trammell Crow; Lehndorff & Babson; Lincoln Asset; NBD Mortgage; Sentinel; and Zell/Merrill Lynch.

Venture capital and LBO managers: Accel Partners; Battery Ventures; Berkshire Partners; Burr, Egan, Deleage; Enterprise Management; Frontenac; Great Lakes Capital; S/L Health Care Investment; Inter Ven Partners; KKR; Marquette Management; MBW; Menlo Ventures; MLGA Partners; Morgan Holland; Newtek Limited Partners; Plant Resources Venture Fund; Regional Financial Enterprises; Robertson, Colman & Stephens; Sunwestern Investment Group; Warburg, Pincus; and Wind Point Partners.

The master custodian is the state treasurer.

Key personnel oversoeing the investment management of the fund are Barry L. Stevens, director, and Gordon H. Linsday, deputy director, both with the Bureau of Investments.

Minnesota Mining & Manufacturing Co.

($ millions)	
Total assets	3,288
Defined benefit	2,373
Total defined contribution	915
401(k)	894
ESOP	21
Employer DB contributions	63
Benefit payments	77
Employer DC contributions	30
Internally managed assets:	
Total DB	22
Total DC	507
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	55.9%
Fixed income	22%
Cash equivalents	8.2%
Real estate equity	7.6%
Mortgages	3%
Other	3.3%
Defined contribution asset mix:	
Company stock	25.2%
Other stock	17.8%
GICs/BICs	50.5%
Loans	6.5%

ST. PAUL, Minn. — As of Sept. 30, Minnesota Mining & Manufacturing Co.'s total employee benefit assets decreased 5.8% to $3.288 billion from $3.49 billion a year earlier. Defined benefit assets decreased 13% during the same period, to $2.373 billion from $2.729 billion. Defined contribution assets increased 20.2%, to $915 million from $761 million.

Equity managers: Domestic — Advanced Investment; Alliance; Ashland; Cursitor-Eaton; Grantham, Mayo, Van Otterloo; IDS Advisory; Investment Research; Mellon Capital; Trinity; and ValueQuest.

International — Grantham, Mayo, Van Otterloo and Schroder.

Fixed-income managers: Domestic — Hoisington; Mellon Capital; PIMCO; and Sun Life, Canada.

Real estate managers: Citibank; Equitable; JMB; RCB; RREEF; Schroder; and TCW.

Other managers: Allen Value Partners; Forstmann Little; HLM Partners; New Amsterdam Partners; Oak Ventures; Olympus; Summit Ventures; Triumph; and Zell Chilmark.

The master trustee and global custodian is Boston Safe Deposit; the investment consultant is Harris Trust Consulting.

Key personnel overseeing the investment management of the fund are Jan Yeomans, director-benefit funds; Deborah Weiss, manager-pension investments; and Rajbir S. Kang, senior pension fund analyst.

Minnesota State Board of Investment

($ millions)	
Total assets	12,098
Defined benefit	11,651
Total defined contribution	447
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Internally managed assets:	
Total DB	5,278
Total DC	86
Hedging devices used:	
Stock options	
Bond options	
Defined benefit asset mix:	
Stocks	34.5%
Fixed income	56%
Cash equivalents	3%
Real estate equity	4.2%
Oil and gas	0.1%
Other	2.2%
Defined contribution asset mix:	
Stock	43%
Fixed income	20.8%
Cash equivalents	22.5%
GICs/BICs	13.7%

ST. PAUL, Minn. — As of Sept. 30, the Minnesota State Board of Investment's total employee benefit assets decreased 2% to $12.098 billion from $12.343 billion a year earlier. Defined benefit assets decreased 2% during the same period, to $11.651 billion from $11.89 billion. Defined contribution assets, in 457 and 401(a) plans, decreased 1.3%, to $447 million from $453 million.

Equity managers: Domestic — Alliance; Concord Capital; Forstmann-Leff; Franklin Portfolio; Geocapital; IDS Advisory; Investment Advisers; Lieber; Rosenberg Institutional; Sasco; Waddell & Reed; and Wilshire Associates.

Fixed-income managers: Domestic — Investment Advisers; Fidelity Management; Lehman Ark; Lincoln Capital; Miller, Anderson & Sherrerd; and Western Asset.

Real estate managers: Aetna; Equitable; Heitman; Prudential; RREEF; State Street Bank; and TCW.

Venture capital managers: Allied Capital; DSV Management; Brinson Partners; Golder Thoma & Cressey; Inman & Bowman; IAI Venture Capital Group; KKR; Matrix Partners; Norwest Venture Capital; Smith Barney Venture; Stamps, Woodsum; T. Rowe Price; and ZC.

Oil and gas managers: Apache; British Petroleum; First Reserve; and J.P. Morgan.

The master trustee is State Street Bank; the investment consultant is Richards & Tierney.

Key personnel overseeing the investment management of the fund are Howard J. Bicker, executive director, and Beth Lehman, assistant executive director.

Public Employees Retirement System of Mississippi

($ millions)	
Total assets	4,319
Defined benefit	4,319
Employer DB contributions	240
Benefit payments	232
Internally managed assets	156
Defined benefit asset mix:	
Stocks	32%
Fixed income	62%
Cash equivalents	6%

JACKSON, Miss. — As of Sept. 30, the Public Employees Retirement System of Mississippi's total employee benefit assets increased 4.6% to $4.319 billion from $4.129 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Bankers Trust; Boston Co.; DFA; Geocapital; INVESCO; Fayez Sarofim; and Sun Bank.

International — Bankers Trust and Hill Samuel.

Fixed-income managers: Domestic — Criterion; Dreyfus; Lehman-Ark; Mellon Bond; PIMCO; and Wells Fargo Nikko.

The master custodian is Trustmark National Bank; the global custodian is Boston Safe Deposit; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Eddie B. Vandiver, deputy director-investments, and Ronald D. Logan, investment manager.

Public School Retirement System of Missouri

($ millions)	
Total assets*	5,800
Defined benefit	5,800
Employer DB contributions	155
Benefit payments	159
*as of June 30, 1990	
Defined benefit asset mix:	
Stocks	18.3%
Fixed income	74.3%
Cash equivalents	6.9%
GICs/BICs	0.5%

JEFFERSON CITY, Mo. — As of June 30, the Public School Retirement System of Missouri's total employee benefit assets increased 8.9% to $5.8 billion from $5.328 billion a year earlier. All assets are defined benefit.

Balanced managers: Boatmen's; Loomis, Sayles; and United Missouri.

The master custodian is Boatmen's; the investment consultant is DeMarche.

Key personnel overseeing the investment management of the fund are David Mustoe, executive secretary, and Joel Walters, assistant executive secretary.

Mobil Oil Corp.

($ millions)	
Total assets	4,675
Defined benefit	2,200
Total defined contribution	2,475
Employer DB contributions	76
DB payments	197
Employer DC contributions	52
Defined benefit asset mix:	
Stocks	48%
Fixed income	38%
Cash equivalents	6%
Other	8%
Defined contribution asset mix:	
Company stock	51%
Other stock	6%
Fixed income	3%

Top 200 funds with assets in GICs/BICs

($ millions)

Fund	Total	Defined benefit	Defined contribution
AT&T	2,859	0	2,859
Westinghouse Electric	1,750	0	1,750
General Dynamics	1,688	185	1,503
General Electric	1,622	404	1,218
Unisys	1,371	169	1,202
Prudential Insurance	1,332	0	1,332
Southern Baptist	1,321	77	1,244
Ford Motor	1,100	0	1,100
Philip Morris	1,085	0	1,085
Halliburton	929	0	929
GTE	854	0	854
Allied-Signal	839	169	670
Mobil Oil	815	0	815
Xerox	810	0	810
J.C. Penney	805	0	805
Procter & Gamble	801	0	801
NYNEX	792	0	792
Ameritech	729	0	729
BP America	714	0	714
Rhode Island	700	700	0
Honeywell	645	5	640
Raytheon	627	0	627
Monsanto	612	0	612
Equitable Life	607	0	607
United Airlines	550	0	550
Grumman	539	0	539
Union Carbide	507	0	507
Travelers	506	506	0
Delta Air Lines	500	0	500
Phillips Petroleum	500	0	500
ITT	499	0	499
Hospital/Health Care	496	496	0
ALCOA	472	0	472
Colorado Employees	453	453	0
United Parcel Service	446	90	356
K mart	441	43	398
PPG Industries	422	1	421
Inland Steel	418	69	349
Southwestern Bell	412	0	412
Johnson & Johnson	400	0	400
Cooper Industries	396	0	396
Pacific Telesis	393	0	393
TRW	386	0	386
Eli Lilly	355	0	355
American Electric Power	349	0	349
Chrysler	349	0	349
Trans World Airlines	321	65	256
Hercules	296	34	262
United Methodist Church	290	136	154
S. California UFCW	253	253	0
Deere	226	0	226
Chevron	219	219	0
Nat'l Rural Electric Co-op	215	0	215
GenCorp	195	0	195
S. New England Telephone	190	0	190
Tennessee Valley Authority	181	26	155
Martin Marietta	168	0	168
Armco	146	11	135
Nat'l Electrical Contractors	144	117	27
Consolidated Natural Gas	143	0	143
USX	140	0	140
Abbott Laboratories	131	0	131
S. California Edison	128	72	56
Presbyterian Church	120	120	0
NCR	110	0	110
Anheuser-Busch	101	51	50
Oklahoma Teachers	90	90	0
Caterpillar	89	0	89
Teamsters, Western Conference	68	68	0
Minnesota State Board	61	0	61
Textron	55	55	0
Operating Engineers Int'l	54	54	0
Pacific Gas & Electric	40	0	40
Hawaii Employees	35	35	0
Missouri School	30	30	0
Boilermaker-Blacksmith	28	28	0
New York Life	28	0	28
Navistar	23	0	23
Bakery & Confectionery	21	21	0
Georgia-Pacific	21	21	0
Atlantic Richfield	19	19	0
Bechtel Power	13	0	13
Bethlehem Steel	10	10	0
UMWA	5	0	5
Total	**28,869**	**4,902**	**34,701**

GICs/BICs	32%
Cash equivalents	8%

FAIRFAX, Va. — As of Sept. 30, Mobil Oil Corp.'s total employee benefit assets increased 2.5% to $4.675 billion from $4.56 billion as of Aug. 31, 1989. Defined benefit assets fell 9.3% during the same period to $2.2 billion from $2.425 billion. Defined contribution assets, in a thrift/savings plan that combines post- and pre-tax and leveraged ESOP provisions, increased 15.9% to $2.475 billion from $2.135 billion.

Equity managers: Domestic - Alliance; Capital Guardian; Jennison; Miller, Anderson & Sherrerd; Fayez Sarofim; and Wells Fargo Nikko.

International - Capital Guardian.

Fixed-income managers: Domestic — Criterion; Henry Kaufman; Loomis, Sayles; Miller, Anderson & Sherrerd; J.P. Morgan; PIMCO; and State Street Research.

GIC managers: John Hancock; Metropolitan Life; and Prudential.

Insurance GAC manager: Metropolitan Life.

Cash managers: United States Trust and Bankers Trust.

TAA manager: Bridgewater Asset.

The master trustee for the defined benefit plan is United States Trust Co. of New York, and for the defined contribution plan, Bankers Trust.

Key personnel overseeing the investment management of the fund are Robert B. Hahnen, manager, corporate benefits-finance; Daniel J. Lynch, assistant manager, corporate benefits-finance; and Alan H. Siegel, manager, corporate benefits & banking.

Monsanto Co.

	($ millions)
Total assets	4,055
Defined benefit	2,959
Defined contribution	1,096
Employer DB contributions	0
Benefit payments	184
Employer DC contributions	32
Internally managed assets:	
Total DB	67
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	60%
Fixed income	25%
Cash equivalents	5%
Real estate equity	10%
Defined contribution asset mix:	
Company stock	29%
Other stock	7%
GICs/BICs	64%

ST. LOUIS — As of Sept. 30, Monsanto Co.'s total employee benefit assets decreased 5.7% to $4.055 billion from $4.3 billion a year earlier. Defined benefit assets decreased 7.5% during the same period, to $2.959 billion from $3.2 billion. Defined contribution assets, which are in a combination profit-sharing/401(k) plan, decreased 0.4%, to $1.096 billion from $1.1 billion.

Equity managers: Domestic — Brown Capital; Delaware Investment; Hagler, Mastrovita & Hewitt; Hotchkis and Wiley; Jennison; Lincoln Capital; Lord, Abbett; Mellon; Morgan Grenfell; T. Rowe Price; PRIMECAP; RCM Capital; State Street Research; and Trinity.

International — Capital Guardian; Martin Currie and Rowe Price-Fleming.

Fixed-income managers: Analytic Options; Boatmen's; Citicorp; Fischer, Francis, Trees & Watts; W.R. Huff; J.P. Morgan; Security Pacific; Standish, Ayer & Wood; STW; and TCW.

Real estate managers: Barings; Equitable; LaSalle; RREEF; TCW Realty; and U.S. Trust.

T.A.A. manager: Chancellor.

The master trustee and global custodian is Northern Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are A.E. Wolfarth, director-pension asset management; P.S. Moench, manager-pension asset management; and D.B. Guthrie, manager-pension analysis.

Top 200 funds with assets in dedicated/immunized bonds

Defined benefit

Fund	($ millions)
Maryland State	5,331
Teamsters, Western	3,969
Ameritech	3,277
Southwestern Bell	1,986
UMWA	1,615
General Dynamics	1,400
ALCOA	1,246
American Airlines	975
Caterpillar	895
Los Angeles Fire & Police	729
Equitable Life	574
Tennessee Valley Authority	535
PPG Industries	528
Raytheon	516
Deere	464
Nevada Employees	457
Inland Steel	453
Consolidated Natural Gas	337
Armco	317
Phillips Petroleum	200
Navistar	197
Procter & Gamble	93
Bakery & Confectionery	85
Teamsters, Central States	81
Boilermaker-Blacksmith	70
Hospital/Health Care	70
United Methodist Church	69
S. New England Telephone	60
Johnson & Johnson	55
United Technologies	25
Total	**25,609**

Defined contribution

Fund	($ millions)
United Methodist Church	220
PPG Industries	9
Total	**229**

Motorola Inc.

	($ millions)
Total assets	2,019
Defined benefit	537
Total defined contribution	1,482
PAYSOP	36
Other	1,446
Employer DB contributions	0
Benefit payments	10
Employer DC contributions	39
Hedging devices used:	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	60.5%
Fixed income	39.5%
Defined contribution asset mix:	
Company stock	8.4%
Other stock	36.6%
Fixed income	54%
Cash equivalents	1%

SCHAUMBURG, Ill. — As of Sept. 30, Motorola Inc.'s total employee benefit assets increased 0.1% to $2.019 billion from $2.017 billion a year earlier. Defined benefit assets decreased 5.1% during the same period, to $536.9 million from $565.9 million. Defined contribution assets increased 2.1%, to $1.482 billion from $1.451 billion.

Equity managers: Domestic — Capital Guardian; Delaware; Jennison; Lehman Ark; Lincoln Capital; Harris Investment; and Northern Trust.

International — Brinson Partners and Morgan Grenfell.

Fixed-income managers: Domestic — Harris Investment; Scudder, Stevens & Clark; Stein Roe & Farnham; and Weiss Peck & Greer.

The master trustee for the pension plan is Harris Trust and for the defined contribution plan, Northern Trust; both firms act as global custodians for the respective plans.

The key person overseeing the investment management of the fund is William H.S. Preece Jr., assistant treasurer-investments.

Investment management consultants will be profiled in the Nov. 11 issue of *Pensions & Investments*.

N

National Electrical Contractors Association-International Brotherhood of Electrical Workers

	($ millions)
Total assets	3,692
Defined benefit	3,479
401(k)	213
Employer DB contributions	175
Benefit payments	187
Employer DC contributions	28
Defined benefit asset mix:	
Stocks	32%
Fixed income	32%
Cash equivalents	11%
Real estate equity	4%
Mortgages	12%
GICs/BICs	4%
Participating mortgages	5%
Defined contribution asset mix:	
Other stock	21%
Fixed income	38%
Cash equivalents	12%
GICs/BICs	13%
Other	16%

WASHINGTON — As of Sept. 30, the National Electrical Contractors Association — International Brotherhood of Electrical Workers' total employee benefit assets increased 0.5% to $3.692 billion from $3.675 billion a year earlier. Defined benefit assets decreased 0.3% during the same period, to $3.479 billion from $3.490 billion. Defined contribution assets increased 15.1% to $213 million from $185 million.

The master trustee is Boston Safe; the investment consultant is Marco Consulting.

Key personnel overseeing the investment management of the fund are John Grau, trustee; Jack Moore, trustee; and Roy Dickinson, executive assistant.

National Rural Electric Cooperative Association

	($ millions)
Total assets	2,120
Defined benefit	1,601
401(k)	519
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Defined benefit asset mix:	
Stocks	46%
Fixed income	35%
Cash equivalents	19%
Defined contribution asset mix:	
Other stock	26%
Fixed income	1%
Cash equivalents	33%
BICs/GICs	40%

WASHINGTON — As of Sept. 30, the National Rural Electric Cooperative Association's total employee benefit assets decreased 8% to $2.12 billion from $2.304 billion a year earlier. Defined benefit assets decreased 12.2% during the same period, to $1.601 billion from $1.824 billion. Defined contribution assets increased 8.1%, to $519 million from $480 million.

Equity managers: Domestic — Barrow, Hanley, Mewhinney & Strauss; Capital Guardian; and Chesapeake.

International — Grantham, Mayo, Van Otterloo and J.P. Morgan.

Fixed-income managers: Domestic — Lincoln Income Group.

The master trustee and global custodian is State Street Bank.

Key personnel overseeing the investment management of the fund are Peter R. Morris, executive director-investments; Stuart E. Teach, senior equity portfolio manager; and Douglas G. Kern, senior fixed-income portfolio manager.

Navistar International Corp.

	($ millions)
Total assets	2,005
Defined benefit	1,971
401(k)	34
Employer DB contributions	48
Benefit payments	231
Employer DC contribution	0
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Fixed income	100%
Defined contribution asset mix:	
Company stock	7.4%
Other stock	24.7%
GICs/BICs	67.9%

CHICAGO — As of Sept. 30, Navistar International Corp.'s total employee benefit assets decreased 2.6% to $2.005 billion from $2.058 billion a year earlier. Defined benefit assets decreased 3% during the same period, to $1.971 billion from $2.031 billion. Defined contribution assets increased 25.9%, to $34 million from $27 million.

Equities managers: Domestic — GAMCO; Prudential; and Frank Russell.

Fixed-income managers: Domestic — Jennison and Morgan Bank.

The master trustee is Northern.

Key personnel overseeing the investment management of the fund are Terry Endsley, director-investments, and Evelyn Willis, pension analyst.

NCR Corp.

	($ millions)
Total assets	1,700
Defined benefit	1,360
Total defined contribution	340
Profit-sharing	70
Thrift or savings	250
PAYSOP	20
Employer DB contributions	na
Benefit payments	50
Employer DC contributions	20
Internally managed assets:	
Total DB	140
Defined contribution asset mix:	
Company stock	7%
Other stock	29%
Fixed income	7%
Cash equivalents	11%
GICs/BICs	28%

DAYTON, Ohio — As of Sept. 30, NCR Corp.'s total employee benefit assets increased 6.1% to $1.7 billion from $1.602 billion a year earlier. Defined benefit assets increased 2.2% during the same period, to $1.36 billion from $1.331 billion. Defined contribution assets increased 25.5%, to $340 million from $271 million.

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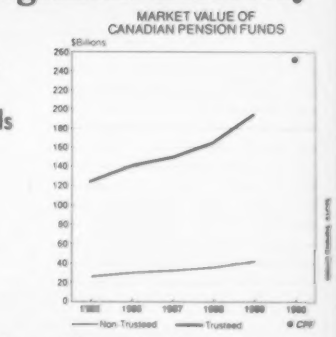

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International — Wells Fargo.

Fixed-income managers: Domestic — Fidelity and J.P. Morgan.

Real estate managers: Equitable.

Other mangers: Dillon, Read and State Street.

The master trustees are Citibank and State Street.

Key personnel overseeing the investment management of the fund are Norman M. Poa, assistant treasurer; Robert D. Smith, manager; and Kent M. Stahl, senior analyst.

Public Employees Retirement System of Nevada

	($ millions)
Total assets	3,308
Defined benefit	3,308
Employer DB contributions	256
Benefit payments	123
Hedging devices used:	
Stock options	
Bond options	
Defined benefit asset mix:	
Stocks	35.2%
Fixed income	53%
Cash equivalents	0.4%
Real estate equity	8.9%
Mortgages	2.2%
Venture capital	0.3%

CARSON CITY, Nev. — As of Sept. 30, the Public Employees Retirement System of Nevada's total employee benefit assets increased 2.2% to $3.308 billion from $3.236 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; DFA; INVESCO; Loomis, Sayles; Wellington; and Wells Fargo Nikko.

International — Axe-Core.

Fixed-income managers: Domestic — Criterion; Patterson Capital; Putnam; and State Street Research.

Real estate managers: Heitman; JMB; Karsten; Lehndorff & Babson; J.P. Morgan; PMRealty; Prudential; and TCW.

Other managers: Balch, Hardy; Bankers Trust; Bay Partners; Criterion; Columbine; Golder, Thoma & Cressey; Interven; Lawrence, Tyrrell, Ortale & Smith; Menlo Ventures; and Summit Ventures.

The master custodian is Security Pacific; the investment consultants are Callan and Wilshire.

Key personnel overseeing the investment management of the fund are Laura B. Wallace, investment officer, and Peggy Clark, investment analyst.

New Jersey Division of Investment

	($ millions)
Total assets*	26,609
Defined benefit	26,335
Total defined contribution	274
Employer DB contributions	850
Benefit payments	500
Employer DC contributions	na
*as of June 30, 1990	
Internally managed assets:	
Total DB	26,335
Total DC	274
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	48.3%
Fixed income	34.1%
Cash equivalents	3.7%
Mortgages	13.9%
Defined contribution asset mix:	
Other stock	66.1%
Fixed income	10.2%
Cash equivalents	23.7%

TRENTON, N.J. — As of June 30, the New Jersey Division of Investment's total employee benefit assets increased 8.5% to $26.609 billion from $24.526 billion as of Sept. 30, 1989. Defined benefit assets increased 8.5% during the same period, to $26.335 billion from $24.278 billion. Defined contribution assets, representing 457 and 403(b) plans, increased 10.5%, to $274 million from $248 million. All assets are managed internally.

The master custodians are: First Fidelity; Midlantic; CoreStates; and Bankers Trust. The global custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are Roland M. Machold, director; Anthony A. Arcuni, deputy director; and Stephen E. Kornrumpf, assistant director.

New Mexico Educational Retirement Board

	($ millions)
Total assets	1,990
Defined benefit	1,990
Employer DB contributions	78
Benefit payments	108
Internally managed assets	1,990
Defined benefit asset mix:	
Stocks	16%
Fixed income	80%
Cash equivalents	4%

SANTA FE, N.M. — As of Sept. 30, the New Mexico Educational Retirement Board's total employee benefit assets increased 5.3% to $1.99 billion from $1.89 billion a year earlier. All assets are defined benefit and managed in-house. Wellington Management serves as an adviser.

The master trustee is Bank of New York.

Key personnel overseeing the investment management of the fund are John E. Young, chief investment officer, and Sharon L. Scrogham, investment officer.

New Mexico Public Employees' Retirement Association

	($ millions)
Total assets	1,860
Defined benefit	1,860
Employer DB contributions	105
Benefit payments	95
Internally managed assets	100
Defined benefit asset mix:	
Stocks	37%
Fixed income	55.7%
Cash equivalents	6%
Real estate equity	0.3%
Mortgages	1%

SANTA FE, N.M. — As of Sept. 30, the New Mexico Public Employees' Retirement Association's total employee benefit assets increased 3.3% to $1.86 billion from $1.8 billion a year earlier. All assets are in defined benefit plans.

Equity managers: Domestic — Bankers Trust and Smith Barney.

Fixed-income managers: Domestic — Brown Brothers Harriman; Criterion; and Wentworth Hauser & Violich.

The master custodian is Bank of New York; the investment consultant is Wilshire.

Richard Miller, director of investments, oversees the investment management of the fund.

New York City Retirement Systems

	($ millions)
Total assets	40,763
Defined benefit	40,763
Employer DB contributions	1,834
Benefit payments	3,464
Internally managed assets	953
Defined benefit asset mix:	
Stocks	30%
Fixed income	57%
Cash equivalents	10%
GICs/BICs	3%

NEW YORK — As of Sept. 30, the New York City Retirement Systems' total employee benefit assets decreased 2% to $40.763 billion from $41.404 billion a year earlier. All assets are defined benefit.

The New York City comptroller's office oversees all investments for the New York City Employees', the Fire Department and the Police Department Retirement systems; and fixed-income investments for the Teachers' and the Board of Education systems. The Teachers' system oversees its GIC and equity investments and the equity investments of the Board of Education system.

All figures in this profile are for the combined systems, except for contribution, benefit payment and internal management figures, which do not include the teachers system because those figures were not available.

Equity managers: Domestic — Bankers Trust; Bear Stearns; Fidelity; Investment Advisors; Lazard Freres; Oppenheimer; J.W. Seligman; and TCW.

Teachers fund: Domestic — Axe-Core; Bankers Trust; Concord; Goldman, Sachs; John A. Levin; Mellon Capital; Prudential Asset; Rosenberg Institutional; Sound Shore; and Trinity.

International — Wells Fargo.

Fixed-income managers: Domestic — Bankers Trust; BEA; Bear Stearns; Fiduciary; Fischer, Francis, Trees & Watts; Investment Advisors; Kennedy; Lehman; Lincoln; Mellon; Miller, Anderson & Sherrerd; Mitchell Hutchins; PIMCO; T. Rowe Price; Putnam; RCM; Smith Barney; State Street; Weiss, Peck & Greer; and Wells Fargo.

International — T. Rowe Price.

The master custodian is Citibank; the investment consultants are Callan; SEI; EAI; Rogers, Casey; and Buck.

Key personnel overseeing the investment management of the fund are Beverly L. Hamilton, third deputy comptroller; William Paolino, chief-Bureau of Asset Management; Candace Cox, division chief-investment strategy; Carol O'Cleireacain, commissioner-Department of Finance; Peter Gilbert, director-mayor's pension unit.

New York Life Insurance Co.

	($ millions)
Total assets*	1,674
Defined benefit	1,443
Total defined contribution	231
Employer DB contributions	0
Benefit payments	53
Employer DC contributions	10
*P&I estimate	
Internally managed assets:	
Total DB	874
Total DC	231
Defined benefit asset mix:	
Stocks	24.8%
Fixed income	73.5%
Real estate equity	1.7%
Defined contribution asset mix:	
Stock	12.7%
Fixed income	70.8%
GICs/BICs	12.3%
Other	4.2%

NEW YORK — As of Sept. 30, *Pensions & Investments* estimates New York Life Insurance Co.'s total employee benefit assets were $1.674 billion. That estimate is based on the $1.668 billion the company reported as of Dec. 31, 1989 and represents a 4.3% decrease from the previous year's estimate of $1.749 billion. Defined benefit assets decreased 5.4% during the same period to an estimated $1.443 billion from an estimated $1.525 billion. Defined contribution assets increased 3.1% to an estimated $231 million from an estimated $224 million.

Equity managers: Domestic — MacKay-Shields and Monitor Capital.

International — Gamma Advisers.

Fixed-income managers: Domestic — MacKay-Shields and Monitor Capital.

International — Gamma Advisers.

Real estate manager: Greystone.

The key personnel overseeing the investment management of the fund are Lester L. Schoenberg, senior vice president; Paul T. Smith, senior vice president; George J. Trapp, vice president.

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New York State and Local Retirement Systems

	($ millions)
Total assets	47,737
Defined benefit	43,737
Employer DB contributions	769
Benefit payments	1,721
Internally managed assets	36,745
Defined benefit asset mix:	
Stocks	43.3%
Fixed income	43.3%
Cash equivalents	3%
Real estate equity	2.2%
Mortgages	5.9%
Other	2.3%

ALBANY, N.Y. — As of Sept. 30, the New York State and Local Retirement Systems' total employee benefit assets decreased 1.1% to $43.737 billion from $44.238 billion a year earlier. All assets defined benefit.

Equity managers: Domestic — Alliance; Capital Guardian; Delaware; Lazard; Lord Abbett; Miller, Anderson; Oppenheimer; J.W. Seligman; Shearson; and Wells Fargo.

International — Alliance and Capital Guardian.

Real estate managers: CIGNA; Copley; Corporate Property Investors; CRM/Select; Goldman, Sachs; JMB; LaSalle; O'Connor; RREEF; Schroder; and TCW.

Limited partnerships: APA Excelsior I and II; Adler & Shaykin; Bridge Capital; Corporate Ventures; Crossroads; Equitable; Forstmann Little; FS Equity; KKR; Gray Klein; Health Care Ventures II; Montgomery Bridge; NYS Business Venture; Peregrine Ventures; U.S. Venture Partners; and Warburg Pincus.

The master custodian and global custodian is Chase Manhattan; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Edward V. Regan, state comptroller, and John E. Hull, deputy comptroller.

New York State Teachers' Retirement System

	($ millions)
Total assets	26,689
Defined benefit	26,689
Employer DB contributions	453
Benefit payments	876
Internally managed assets	24,527
Defined benefit asset mix:	
Stocks	53%
Fixed income	35%
Cash equivalents	2%
Real estate equity	3%
Mortgages	6%
Other	1%

ALBANY, N.Y. — As of Sept. 30, the New York State Teachers' Retirement System's total employee benefit assets decreased 5.1% to $26.689 billion from $28.13 billion a year earlier. All assets are defined benefit.

Equity managers: Sanford Bernstein; Cowen; GAMCO; Lehman Management; Morgan Grenfell; Peregrine Capital; and RCM.

Fixed-income managers: Domestic — Sanford Bernstein.

Real estate managers: Aetna Life; Equitable Life; Equitable Real Estate; Goldman, Sachs; Jones Lang Wootton; LaSalle; Lehndorff & Babson; J.W. O'Connor; Prudential Insurance; and RREEF.

The master custodian is Bankers Trust; the investment consultant is Buck.

Key personnel overseeing the investment management of the fund are Harold N. Langlitz, executive director; Edward J. Reno Jr., securities investment officer; and George M. Philip, chief real estate investment officer.

North Carolina Retirement System

	($ millions)
Total assets	17,289
Defined benefit	17,289
Employer DB contributions	576
Benefit payments	620
Internally managed assets	11,905
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	30%
Fixed income	69%
Real estate equity	1%

RALEIGH, N.C.— As of Sept. 30, the North Carolina Retirement System's total employee benefit assets increased 3% to $17.289 billion from $16.791 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Branch Banking & Trust; Central Carolina Bank; First Citizens Bank; First Union National; First Wachovia; North Carolina National Bank; and Wellington.

International — Wellington.

Real estate managers: Aetna; CIGNA; First Wachovia; Goldman, Sachs; J.P. Morgan; NCNB National Bank; and Sentinel.

Other managers: Carolinas Capital; DLJ Capital; John Hancock Venture Partners; InterSouth Partners; Kitty Hawk Capital; Massey Burch; N.C. Enterprise; and Venture First Associates.

The master custodian is The Bank

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of New York.

Key personnel overseeing the investment management of the fund are Harlan E. Boyles, state treasurer; C. Douglas Chappell, deputy treasurer and director of the investment and banking division; and P. Keith Leonard, assistant state investment officer.

Northern California Carpenters District Council

($ millions)	
Total assets*	1,608
Defined benefit	1,307
Total defined contribution	301
Employer DB contributions	56
Benefit payments	na
Employer DC contributions	32
*From Money Market Directory	

OAKLAND, Calif. — As of May 1990, the Northern California Carpenters District Council reported total employee benefit assets of $1.608 billion, according to the Money Market Directory. Defined benefit assets totaled $1.307 billion and defined contribution assets, $301 million.

The key person overseeing the investment management of the fund is Houston Kemper, administrator.

Northrop Corp.

($ millions)	
Total assets	3,304
Defined benefit	2,566
Total defined contribution	738
Thrift or savings	612
ESOP	126
Employer DB contributions	0
Benefit payments	70
Employer DC contributions	37
Defined benefit asset mix:	
Stocks	71%
Fixed income	22%
Cash equivalents	7%
Defined contribution asset mix:	
Company stock	18%
Other stock	42%
Fixed income	12%
Cash equivalents	28%

LOS ANGELES — As of Sept. 30, Northrop Corp.'s total employee benefit assets decreased 8.8% to $3.304 billion from $3.623 billion a year earlier. Defined benefit assets decreased 8.9% during the same period, to $2.566 billion from $2.816 billion. Defined contribution assets decreased 8.6%, to $738 million from $807 million.

Equity managers: Domestic — Capital Guardian; First Manhattan Capital; Forstmann-Leff; Jennison; Putnam Advisory; RCM; Security Pacific; State Street Research; and U.S. Trust of California.

Fixed-income managers: Domestic — Fischer, Francis, Trees & Watts and Jennison Associates.

The master trustee is Bankers Trust.

The key person overseeing the investment management of the fund is R.M. Abelson, director-trust administration and investments.

NYNEX Corp.

($ millions)	
Total assets	14,383
Defined benefit	11,886
Total defined contribution	2,497
Employer DB contributions	0
Benefit payments	612
Employer DC contributions	60
Internally managed assets:	
Total DB	1,555
Total DC	792
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	53%
Fixed income	34.9%
Cash equivalents	0.8%
Real estate equity	10.2%
Other	1.1%
Defined contribution asset mix:	
Company stock	29.7%
Other stock	24%
Fixed income	9.5%
GICs/BICs	35%
Loan fund	1.8%

NEW YORK — As of Sept. 30, NYNEX Corp.'s total employee benefit assets decreased 10.5% to $14.383 billion from $16.062 billion a year earlier. Defined benefit assets decreased 10.4% during the same period, to $11.886 billion from $13.262 billion. Defined contribution assets decreased 10.8%, to $2.497 billion from $2.8 billion. The defined contribution plan is a leveraged ESOP valued at $5.273 billion, of which $2.497 billion is in plan assets and the remainder is in borrowings.

Equity managers: Domestic — American National Bank; Barrow, Hanley, Mewhinney & Strauss; Daniel Breen; DFA; Fidelity Management; Franklin Portfolio; Investment Research; McCowan Associates; Mitchell Hutchins; Trinity; TCW; and Wells Fargo Nikko.

International — American National Bank; Capital Guardian International; DFA; Morgan Stanley; Pictet International; State Street Bank; and Wells Fargo Nikko.

Fixed-income managers: Domestic — Boston Co.; Brown Brothers Harriman; Global Fixed Income; John Hancock; Jennison; Lincoln; Miller, Anderson & Sherrerd; Mellon Bond; Mitchell Hutchins; Standish, Ayer & Wood; State Street Research; and Western Asset.

International — Global Fixed Income and WorldInvest.

Real estate managers: AEW; Corporate Property Investors; Heitman; Mellon-McMahan; and TREET.

The master trustee and global custodian is Mellon Bank.

Key personnel overseeing the investment management of the fund are Joseph E. Clines, director-investment management and securities registration; Richard L. Wolf, investment director-pension and savings plan investment management; Joseph A. Sutka, investment director-research, planning and internal investments; and Edward X. Roche, investment director-pension and savings plan administration.

O

The Police and Firemen's Disability and Pension Fund of Ohio

($ millions)	
Total assets	3,101
Defined benefit	3,101
Employer DB contributions	159
Benefit payments	258
Internally managed assets	1,940
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	29%
Fixed income	57.6%
Cash equivalents	5%
Real estate equity	7.6%
Mortgages	0.4%
Venture capital	0.4%

COLUMBUS, Ohio — As of Sept. 30, The Police and Firemen's Disability and Pension Fund of Ohio's total employee benefit assets increased 1% to $3.101 billion from $3.07 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Atalanta/Sosnoff; Axe-Core; Bankers Trust; Duff & Phelps; Loomis, Sayles; Oppenheimer; Society Bank; and Value Line.

Real estate managers: Copley; Meyer;MIG; Schroder; and TA Associates.

Other managers: Cardinal Financial; Primus; and Chemicals and Materials Enterprise Associates.

The custodian is the state treasurer; the real estate investment consultant is Townsend.

Key personnel overseeing the investment management of the fund are Theodore G. Hall, assistant director-investments, and Christopher J. Woods, fixed-income portfolio manager.

Ohio Public Employees' Retirement System

($ millions)	
Total assets	20,595
Defined benefit	20,595
Employer DB contributions	804
Benefit payments	914
Internally managed assets	19,620
Defined benefit asset mix:	
Stocks	16.4%
Fixed income	52.5%
Cash equivalents	26.4%
Real estate equity	4.7%

COLUMBUS, Ohio — As of Sept. 30, the Ohio Public Employees' Retirement System's total employee benefit assets increased 6.7% to $20.595 billion from $19.305 billion a year earlier. All assets are defined benefit.

Real estate managers: AFL-CIO; Lowe Enterprises; NCNB; Rothschild; Sentinel; and Wells Fargo.

The custodian is the state treasurer.

The key person overseeing the investment management of the fund is Robert A. McLaughlin, investment officer.

Top 200 funds with assets in mortgages

Defined benefit

Fund	($ millions)
Ohio State Teachers	3,276
California Employees	3,000
Florida State Board	2,698
New York State & Local	2,587
Alabama Retirement	2,245
New York State Teachers	1,584
Washington State Board	1,100
State of Michigan	1,049
Pennsylvania Employes	680
California State Teachers	618
Oregon Employes	554
Nat'l Electrical Contractors	435
Hawaii Employees	361
Colorado Employees	322
ALCOA	300
Virginia Retirement	259
Arizona State	244
Kentucky Retirement	220
Connecticut Trust Funds	217
Operating Engineers	208
Alaska State	186
Wisconsin State Board	185
Bakery & Confectionery	181
Pennsylvania School	155
Westinghouse Electric	152
Idaho Employees	131
Kentucky Teachers	98
Union Carbide	94
Los Angeles County	92
Presbyterian Church	80
Nevada Employees	72
Minnesota Mining & Mfg.	70
Arkansas Teachers	55
Episcopal Church	50
Illinois Municipal	42
Teamsters, Western	42
Chicago Municipal	41
USX	30
Ohio School Employees	28
Aetna	22
New Mexico Employees	20
Utah State	20
Maryland State	18
Southern Baptist	17
Owens-Illinois	16
Ohio Police & Firemen	13
Atlantic Richfield	10
Georgia Teachers	10
Illinois State Board	6
Phillips Petroleum	5
S. California UFCW	2
United Methodist Church	1
GenCorp	1
Total	**23,902**

Defined contribution

Fund	($ millions)
TIAA-CREF	19,500
Halliburton	2
United Methodist Church	1
Total	**19,503**

School Employees Retirement System of Ohio

($ millions)	
Total assets	2,824
Defined benefit	2,824
Employer DB contributions	182
Benefit payments	255
Internally managed assets	1,752
Defined benefit asset mix:	
Stocks	37.7%
Fixed income	42.9%
Cash equivalents	5.7%
Real estate equity	11.8%
Mortgages	1%
Venture capital	0.9%

COLUMBUS, Ohio — As of Sept. 30, the School Employees Retirement System of Ohio's total employee benefit assets increased 0.2% to $2.824 billion from $2.817 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Mellon Capital.

Real estate managers: Equitable; J.P. Morgan; NCNB; and Prudential.

Venture capital managers: Cardinal Capital; Morganthaler; and Primus.

The master custodian is Ameritrust; the investment consultants are Ronald A. Karp and Institutional Property Consultants.

Key personnel overseeing the investment management of the fund are Thomas R. Anderson, executive director; Paul M. Kubinsky, director of investments; and Robert G. Cowman, assistant director of investments.

The State Teachers Retirement System of Ohio

($ millions)	
Total assets	18,200
Defined benefit	18,200
Employer DB contributions	755
Benefit payments	1,009
Internally managed	18,200
Hedging devices used:	
Stock options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	28.5%
Fixed income	34.9%
Cash equivalents	6.5%
Real estate equity	12%
Mortgages	18%
Venture capital	0.1%

COLUMBUS, Ohio — As of Sept. 30, the State Teachers Retirement System of Ohio's total assets increased 0.8% to $18.2 billion from $18.059 billion a year earlier. All assets are defined benefit and internally managed.

The master custodian is Bank One Trust; the investment consultants are Wellington Management and Karsten Realty.

Key personnel overseeing the investment management of the fund are Stephen A. Mitchell, deputy executive director, and Daniel M. Szente, assistant director-investments.

Oklahoma Teachers' Retirement System

($ millions)	
Total assets	2,097
Defined benefit	1,957
Total defined contribution	140
Employer DB contributions	145
Benefit payments	274
Employer DC contributions	0
Internally managed assets:	
Total DB	350
Defined benefit asset mix:	
Stocks	35.5%
Fixed income	50%
Cash equivalents	10%
GICs/BICs	4.5%
Defined contribution asset mix:	
Fixed income	90%
Cash equivalents	10%

OKLAHOMA CITY — As of Sept. 30, the Oklahoma Teachers' Retirement System's total employee benefit assets increased 6.6% to $2.097 billion from $1.968 billion a year earlier. Defined benefit assets increased 5.2% during the same period, to $1.957 billion from $1.861 billion. Defined contribution assets — in a 403(b) plan — increased 12% to $140 million from $125 million.

Equity managers: Domestic — Chicago Corp.; Eagle; Hotchkis and Wiley; Tom Johnson; Mitchell Hutchins; and TCW.

Fixed-income managers: Domestic — Liberty National; Neuberger & Berman; Mellon Bond; and Investment Advisers.

The master custodian is Bankers Trust; the investment consultant is Mercer.

Key personnel overseeing the investment management of the fund are R.L. Kopsa, secretary and treasurer, and Jo D. Witt, director of investments.

Central Pension Fund of the International Union of Operating Engineers

($ millions)	
Total assets	2,114
Defined benefit	2,114
Employer DB contributions	115
Benefit payments	94
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	28.1%
Fixed income	40.1%
Cash equivalents	15.3%
Real estate equity	2.8%
Mortgages	11.2%
GICs/BICs	2.5%

WASHINGTON — As of Sept. 30, the Central Pension Fund of the International Union of Operating Engineers' total employee benefit assets decreased 2.1% to $2.114 billion from $2.159 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Sanford Bernstein; Concord Capital; GAMCO; Husic Capital; Shearson Asset; Southeastern; Wells Fargo Nikko.

Fixed-income managers: Domestic — Duff & Phelps; Loomis, Sayles; STW; Wells Fargo Nikko; Western Asset.

Real estate managers: AFL-CIO; AEW; and ULLICO.

The master trustee is State Street Bank; the investment consultant is Ennis, Knupp.

Key personnel overseeing the investment management of the fund are Jack E. Johnson, director of finance, and Robert A. Birch, assistant director of finance.

Oregon Public Employes Retirement System

($ millions)	
Total assets	9,900
Defined benefit	9,900
Employer DB contributions	560
Benefit payments	400
Internally managed assets	3,000
Defined benefit asset mix:	
Stocks	56.9%
Fixed income	23.7%
Real estate equity	5.4%
Mortgages	5.5%
Venture capital	0.6%
LBOs	7.9%

SALEM, Ore. — As of Sept. 30, the Oregon Public Employes Retirement System's total employee benefit assets decreased 11.4% to $9.9 billion from $11.178 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Batterymarch; BEA; Columbia Management; Cutler; Franklin Asset; Froley, Revy; General American Investors; Harris Associates; Hotchkis and Wiley; Pinnacle Associates; Quest Advisory; Rosenberg Capital; Fayez Sarofim; George Springman; and Thompson/Rubenstein.

International — Cursitor-Eaton; Daiwa; Globe-Finlay; Matushka, Moser; Nomura; Phillipe Advisory; and Rowe Price-Fleming.

The master custodian is First Interstate Bank of Oregon; the global custodian is Morgan Stanley; the investment consultants are Frank Russell and Wilshire.

Key personnel overseeing the investment management of the fund are James George, investment manager; Bill Unvertzagt, fixed income manager; Terry Canby, real estate manager; and Jay Fewel, equity manager.

Owens-Illinois Inc.

($ millions)	
Total assets	2,326
Defined benefit	2,021
401(k)	305
Employer DB contributions	4
Benefit payments	142
Employer DC contributions	5
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	70%
Fixed income	14%
Cash equivalents	7%

Real estate equity	8%
Mortgages	1%
Defined contribution asset mix:	
Other stock	23.6%
Fixed income	2.6%
Cash equivalents	10.2%
GICs/BICs	63.6%

TOLEDO, Ohio — As of Sept. 30, Owens-Illinois Inc.'s total employee benefit assets decreased 12% to $2.326 billion from $2.644 billion a year earlier. Defined benefit assets decreased 13.9% during the same period, to $2.021 billion from $2.346 billion. Defined contribution assets increased 2.3%, to $305 million from $298 million.

Equity managers: Domestic — Barrow, Hanley, Mewhinney & Strauss; DFA; Emerging Growth; Franklin Portfolio; Harbor Capital; Jennison; Lazard Freres; Lieber; and Lincoln Capital.

International — Grantham, Mayo, Van Otterloo; Marsh & Cunningham; and Morgan Grenfell.

Fixed-income managers: Domestic — Jennison; Lazard Freres; PIMCO; State Street Bank; and Trustcorp.

International — Julius Baer.

Real estate managers: AEW; American Agricultural; Boston Co.; Prudential; RPI; RREEF; and Security Capital.

The master trustee is First Wachovia; the global custodian is Chase London; the investment consultant is Richards & Tierney.

Key personnel overseeing the investment management of the fund are Leo A. Wesselmann, senior vice president and chief financial officer; Ronald C. Boller, corporate vice president and director-benefit finance; and Constance L. Souders, manager-employee benefit plan administration.

P

Pacific Gas & Electric Co.

($ millions)	
Total assets	4,172
Defined benefit	2,797
401(k)	1,375
Employer DB contributions	121
Benefit payments	126
Employer DC contributions	30
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	54%
Fixed income	17%
Cash equivalents	5%
Real estate equity	11%
Foreign stock	13%
Defined contribution asset mix:	
Company stock	90%
Other stock	6%
Cash equivalents	1%
GICs/BICs	3%

SAN FRANCISCO — As of Sept. 30, Pacific Gas & Electric Co.'s total employee benefit assets decreased 2% to $4.172 billion from $4.259 billion a year earlier. Defined benefit assets decreased 8.5% during the same period, to $2.797 billion from $3.056 billion. Defined contribution assets increased 14.3%, to $1.375 billion from $1.203 billion.

Equity managers: Domestic — Bankers Trust; Barrow, Hanley, Mewhinney & Strauss; Dodge & Cox; Geewax Terker; Jundt/Capen; McCowan; Metropolitan Life; Miller, Anderson & Sherrerd; NCM; RCM; and Wells Fargo.

International — Arnhold & S. Bleichroeder; Bankers Trust; Capital Guardian; Oechsle; and Wells Fargo.

Fixed-income managers: Domestic — Sanford Bernstein; Fisher, Francis, Trees & Watts; Metropolitan Life; Miller Anderson & Sherrerd; Prudential; and Wells Fargo.

Real estate managers: Corporate Property Investors; JMB; LaSalle; Metropolitan Life; Prudential; RREEF; and TCW.

The master trustee and global custodian is State Street Bank; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Gordon R. Smith, vice president-finance and rates; Jack F. Jenkins-Stork, treasurer; and Sunny Oberoi, director-investments and benefit finance.

Pacific Telesis Group

($ millions)	
Total assets	10,896
Defined benefit	9,124
401(k)	1,772
Employer DB contributions	8
Benefit payments	382
Employer DC contributions	68
Internally managed assets:	
Total DB	151
Total DC	1,193
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	60.3%
Fixed income	27.4%
Cash equivalents	1.9%
Real estate equity	9.2%
Venture capital	1.2%
Defined contribution asset mix:	
Company stock	50.6%
Other stock	21.8%
Fixed income	5.7%
GICs/BICs	21.9%

SAN FRANCISCO — As of Sept. 30, Pacific Telesis Group's total employee benefit assets decreased 4.8% to $10.896 billion from the $11.443 billion the Money Market Directory reported the company had as of June 30, 1989. Defined benefit assets decreased 5.7% during the same period, to $9.124 billion from $9.674 billion. Defined contribution assets increased 0.2% to $1.772 billion from $1.769 billion.

Equity managers: Domestic — Delphi Management; Dodge & Cox; Hotchkis and Wiley; IDS Equity; Jundt/Capen; Lord, Abbett; John McStay; Mellon; Morgan Grenfell; Progress Equity; RCM; Sit; United Capital; and Wellington.

International — Acadian; Capital Guardian; DFA; HD International; Morgan Grenfell; Nomura; Oechsle; Rowe Price-Fleming; Sit/Kim; State Street; Walter Scott; Wells Fargo Nikko; and Yamaichi.

Fixed-income managers: Domestic — Dodge & Cox; Fischer, Francis, Trees & Watts; W.R. Huff; PIMCO; Progress Trust; TCW; Weiss Peck & Greer; and Western Asset.

Tactical asset allocation managers: QuantiLogic and Wells Fargo Nikko.

Real estate managers: Copley; JMB; LaSalle; TCW Realty; and Yarmouth.

Venture capital: Warburg Pincus.

The master trustee is Northern Trust; the global trustee is Bank of America; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are E.D. Taylor, executive director-investment management, and R.P. McGahan, director-pension fund.

J.C. Penney Co. Inc.

($ millions)	
Total assets	2,964
Defined benefit	1,222
Defined contribution	1,742
Employer DB contributions	0
Benefit payments	43
Employer DC contributions	47
Internally managed assets:	
Total DC	805
Defined benefit asset mix:	
Stocks	55%
Fixed income	23%
Cash equivalents	11%
Real estate equity	9%
Venture capital	2%
Defined contribution asset mix:	
Company stock	50%
Other stock	3%
GICs/BICs	47%

DALLAS — As of Sept. 30, J.C. Penney Co. Inc.'s total employee benefit assets decreased 10.4% to $2.964 billion from $3.308 billion a year earlier. Defined benefit assets decreased 9.1% during the same period, to $1.222 billion from $1.345 billion. Defined contribution assets decreased 11.3%, to $1.742 billion from $1.963 billion.

Equity managers: Domestic — Batterymarch; Geocapital; Leiber; Miller, Anderson & Sherrerd; and RCM.

International — Fidelity; Grantham, Mayo, Van Otterloo; and HD International.

Fixed-income managers: Domestic — W.R. Huff; MacKay-Shields; and Neuberger & Berman.

Real estate managers: RREEF and TCW.

Balanced manager: Scudder, Stevens & Clark.

TAA managers: Matrix and Wells Fargo.

The master trustee and global custodian is State Street Bank; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Philip Halpern, managing director-benefit investments, and Mary Jane Akerman, portfolio manager.

Pennsylvania State Employes' Retirement System

($ millions)	
Total assets*	9,485
Defined benefit	9,485
Employer DB contributions	581
Benefit payments	567
*as of Aug. 31, 1990	
Defined benefit asset mix:	
Stocks	44.6%
Fixed income	24.7%
Cash equivalents	13.3%
Real estate equity	9.2%
Mortgages	7.2%
Other	1%

HARRISBURG, Pa. — As of Aug. 31, the Pennsylvania State Employes' Retirement System's total employee benefit assets decreased 0.2% to $9.485 billion from $9.504 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Barrow, Hanley, Mewhinney & Strauss; Geewax, Terker; Mellon; McGlinn; Miller, Anderson & Sherrerd; Pilgrim, Baxter, Greig; Provident Investment; SunBank Capital; Trinity; and Wells Fargo Nikko.

International — Miller, Anderson & Sherrerd; Morgan Grenfell; and Scudder, Stevens & Clark.

Fixed-income managers: Domestic — Delaware; W.R. Huff; Latimer & Buck; Mellon Bond; and Miller, Anderson & Sherrerd.

Tactical asset allocation manager: Wells Fargo Nikko.

Real estate managers: Aetna; Alex. Brown Kleinwort Benson; Copley; Corporate Property Investors; John Hancock; Heitman; JMB; Metric; Prudential; PSI; and Sentinel.

Private placement manager: CIGNA.

LBO managers: Brentwood; Code, Hennessy & Simmons; Maverick; Murphy & Fauver; and Russell Rea & Cappala.

Venture capital managers: APA/Fostin; CEO Venture; Fostin Capital; Genesis Seed Fund; Grotech; Keystone; NEPA; Pittsburgh Seed Fund; PNC; Point Venture; TDH; and Zero Stage.

Cash manager: Payden & Rygel.

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sylvania Department of Treasury; the domestic sub-custodian is CoreStates; the global sub-custodian is State Street; the investment consultants are Wilshire and Ronald Karp.

Key personnel overseeing the investment management of the fund are Kenneth G. Mertz II, chief investment officer; Karen Nicely, assistant chief investment officer; and David D. Burnett, administrator-investment office.

Pennsylvania Public School Employes' Retirement System

	($ millions)
Total assets*	17,268
Defined benefit	17,268
Employer DB contributions	990
Benefit payments	851
*as of June 30, 1990	
Internally managed assets	1,100
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	36.9%
Fixed income	50%
Cash equivalents	7.3%
Real estate equity	2.8%
Mortgages	1%
Other	2%

HARRISBURG, Pa. — As of June 30, the Pennsylvania Public School Employes' Retirement System's total employee benefit assets increased 11.9% to $17.268 billion from $15.43 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Bankers Trust; Birmingham Capital; Cashman, Farrell; Columbus Circle; Crabbe-Huson; Cutler; Delaware; Dietche & Field; Dreman; Eagle; EAI; Fielding; Gulf; Hudson Capital; MacKenzie Financial; Mellon Bank; Mellon Capital; Miller, Anderson & Sherrerd; Mortgage Government Securities/AIM; Munder; Newbold's; Oppenheimer; Pilgrim Baxter Greig; PNC Financial; Roxbury; Security Pacific; and TCW.

Global — Acadian Financial and WorldInvest.

Fixed-income managers: Domestic — Criterion; Delaware; EAI; Glenmede Trust; Income Research & Management; Loomis, Sayles; Mellon Bank; Miller, Anderson & Sherrerd; Morgan Grenfell; Morgan Stanley; NCM Capital; PIMCO; Pittsburgh National; and Putnam.

Global — Beutel Goodman; London & Bishopgate; Payden & Rygel; PCM International; and WorldInvest.

Balanced manager: Mellon Capital.

Cash managers: London & Bishopgate and PCM International.

Real estate managers: Fidelity Bank; Jones Lang Wootton; and Morgan Stanley.

Mortgage manager: Fidelity Bank.

Convertible manager: Glenmede Trust.

Options managers: Acorn Asset; Darien Capital; Loomis, Sayles; and Oppenheimer Option.

Venture capital managers: APA/Fostin; CEO Venture Fund; CIGNA; Commonwealth Venture Partners; Genesis Seed Fund; Loyalhanna Commonwealth Fund; and NEPA.

The master custodian is First Pennsylvania; the global custodian is State Street; the investment consultant is Evaluation Associates.

The key person overseeing the investment management of the fund is John Lane, acting chief investment officer.

Philip Morris Cos. Inc.

	($ millions)
Total assets	6,983
Defined benefit	4,468
Defined contribution	2,515
Employer DB contributions	na
Benefit payments	224
Employer DC contributions	146
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	67%
Fixed income	26%
Cash equivalents	5%
Real estate equity	2%
Defined contribution asset mix:	
Company stock	33%
Other stock	20%
Fixed income	1%
GICs/BICs	43%
Other	3%

NEW YORK — As of Sept. 30, Philip Morris Cos. Inc.'s total employee benefit assets decreased 6.5% to $6.983 billion from $7.47 billion a year earlier. Defined benefit assets decreased 13.4% during the same period, to $4.468 billion from $5.16 billion. Defined contribution assets increased 8.9%, to $2.515 billion from $2.31 billion.

Equity managers: Domestic — Alliance; Ardsley; Ariel; Sanford Bernstein; Chancellor; Delphi; Eagle; First Wisconsin; Glickenhaus; Neuberger & Berman; RCM; State Street Bank; Trinity; and Wellington.

International — Morgan Grenfell and State Street Bank.

Fixed-income managers: Domestic — Fischer, Francis, Trees & Watts; Loomis, Sayles; PIMCO; and Reams Asset.

Real estate managers: Heitman; JMB; J.P. Morgan; NewCourt; Schroder; and TCW.

Other managers: Blackstone; Consumer Venture Partners; John Hancock Venture; NewCourt; and Sprout.

The master trustee and global custodian is State Street Bank.

Key personnel overseeing the investment management of the fund are David M. Kirby, vice president, and Mary Lee Calimano, director.

Phillips Petroleum Co.

	($ millions)
Total assets	2,450
Defined benefit	450
Total defined contribution	2,000
Thrift or savings	1,400
ESOP	600
Employer DB contributions	0
Benefit payments	10
Employer DC contributions	25
Defined benefit asset mix:	
Stocks	40%
Fixed income	50%
Cash equivalents	4%
Real estate equity	6%
Defined contribution asset mix:	
Company stock	56%
Fixed income	6%
GICs/BICs	38%

BARTLESVILLE, Okla. — As of Sept. 30, Phillips Petroleum Co.'s total employee benefit assets increased 8.9% to $2.45 billion from $2.25 billion a year earlier. Defined benefit assets were unchanged at $450 million. Defined contribution assets increased 11.1% to $2 billion from $1.8 billion.

Equity managers: Domestic — Barrow, Hanley, Mewhinney & Strauss; Travelers; and Wells Fargo.

Fixed-income managers: Domestic — Equitable; J.P. Morgan; and Prudential.

Real estate managers: JMB and Victor Palmieri.

Other managers: Forstmann Little.

The master trustee is Citibank for the defined benefit plan and Bankers Trust for the defined contribution plan.

The key person overseeing the investment management of the fund is R.W. Holsapple, manager-foreign exchange and investments.

PPG Industries Inc.

	($ millions)
Total assets	2,011
Defined benefit	892
401(k)	1,119
Employer DB contributions	0
Benefit payments	78
Employer DC contributions	41
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	41%
Fixed income	59%
Defined contribution asset mix:	
Company stock	58%
Other stock	2%
GICs/BICs	40%

PITTSBURGH — As of Sept. 30, PPG Industries Inc.'s total employee benefit assets decreased 3.6% to $2.011 billion from $2.086 billion a year earlier. Defined benefit assets decreased 13.1% during the same period, to $892 million from $1.026 billion. Defined contribution assets increased 5.6%, to $1.119 billion from $1.06 billion.

Equity managers: Domestic — Capital Growth; Chancellor; Mellon Capital; Neuberger & Berman; and Pinnacle.

International — Schroder and Morgan Stanley.

Fixed-income managers: Domestic — J.P. Morgan.

GIC manager: Bankers Trust.

The master trustee is Mellon Bank; the global custodian is Mellon-Pictet; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Charles H. Elmer, director-benefits investment and financing; and Ellen G. Peterson and William R. Dewalt, managers-benefits investment and financing.

Board of Pensions of the Presbyterian Church (U.S.A.)

	($ millions)
Total assets	2,300
Defined benefit	2,300
Employer DB contributions	55
Benefit payments	75
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	53%
Fixed income	27%
Cash equivalents	6%
Real estate equity	10%
GICs/BICs	4%

PHILADELPHIA — As of Sept. 30, the Board of Pensions of the Presbyterian Church's total employee benefit assets decreased 4.2% to $2.3 billion from $2.4 billion a year earlier. All are defined benefit assets.

Equity managers: Domestic — Barrow, Hanley; Capital Guardian; Geocapital; Kirr, Marbach; Lazard Freres; Morgan Grenfell; J.P. Morgan; Quest Advisory; Templeton; Trusco; and Wells Fargo Nikko.

International — Capital Guardian; Marvin and Palmer; PCM International; Templeton International; and Wells Fargo Nikko.

Fixed-income managers: CoreStates; Loomis, Sayles; NCM; PIMCO; Reams; and Standish, Ayer & Wood.

The master trustee and global custodian is Mellon; the investment consultants are Mellon and Callan.

Judith D. Freyer, vice president-investments, treasurer and chief investment officer, oversees investment management of the fund.

Procter & Gamble Co.

	($ millions)
Total assets*	6,028
Defined benefit	171
Total defined contribution	5,857
Profit-sharing	5,770
Thrift or savings	87
Employer DB contributions	3
Benefit payments	2
Employer DC contributions	153
*as of June 30, 1990	
Internally managed assets:	
Total DC	5,770
Defined benefit asset mix:	
Stocks	23%
Fixed income	77%
Defined contribution asset mix:	
Company stock	82.8%
Other stock	1.2%
Cash equivalents	2%
GICs/BICs	14%

CINCINNATI — As of June 30, Procter & Gamble Co.'s total employee benefit assets increased 21.3% to $6.028 billion from $4.97 billion as of Sept. 30, 1989. Defined benefit assets increased 0.6% during the same period, to $171 million from $170 million. Defined contribution assets increased 22%, to $5.857 billion from $4.8 billion.

Equity managers: Domestic — Aetna; Ariel; Babson; Bankers Trust; Sanford Bernstein; Hartford; Northern Trust; and Wells Fargo Nikko.

International — Wells Fargo Nikko.

Fixed-income managers: Domestic — Bankers Trust; Lowe, Brockenbrough; J.P. Morgan; and Northern Trust.

The master trustees are Northern Trust, Bank of New York and Connecticut National Bank; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are John Smith, pension manager; George Gibson, vice president-treasurer; and Joe R. Lawhead, assistant treasurer.

The Prudential Insurance Co. of America

	($ millions)
Total assets	5,856
Defined benefit	4,297
Total defined contribution	1,559
Thrift or savings	1,390
401(k)	135
Other	34
Employer DB contributions	0
Benefit payments	1[illegible]%
Employer DC contributions	34
Internally managed assets:	
Total DB	4,297
Total DC	1,559
Defined benefit asset mix:	
Stocks	38.3%
Fixed income	28.6%
Cash equivalents	19.5%
Real estate equity	12.8%
Other	0.8%
Defined contribution asset mix:	
Other stock	14.6%
GICs/BICs	85.4%

NEWARK, N.J. — As of Sept. 30, The Prudential Insurance Co. of America's total employee benefit assets declined 3.1% to $5.856 billion from $6.042 billion a year earlier. Defined benefit assets declined by 8.4% during the same period to $4.297 billion from $4.691 billion. Defined contribution assets increased by 15.4% to $1.559 billion from $1.351 billion.

All assets are managed by Prudential affiliates.

The investment consultant is Prudential Diversified.

Key personnel overseeing the investment management of the fund are Paul C. Guidone, managing director and chief investment officer; James Scott, managing director; and Michael A. Lenarcic, director-portfolio management.

Harbor Capital Advisors

Toledo-based Harbor Capital Advisors is the sponsor of the Harbor Fund, a family of six no-load, non-overlapping mutual funds--each carefully selected to provide different risk and return characteristics.

Knowledgeable investors are turning to Harbor Capital Advisors for investment of their IRA's, 401(k), Pension, Profit Sharing, Foundation and other investment needs.

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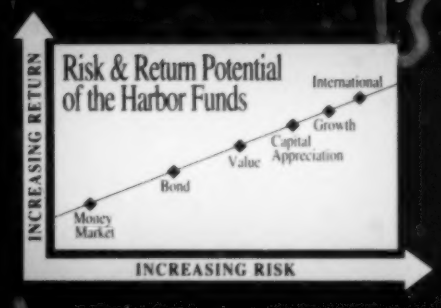
Call: 800-422-1050

The prospectus contains more complete information on the Fund, including management fees and expenses. Please read it carefully before you invest or send money.



HARBOR FUND

Harbor Fund is managed by Harbor Capital Advisors and distributed by HCA Securities, Inc., wholly-owned subsidiaries of Owens-Illinois.

R

Raytheon Co.

	($ millions)
Total assets	2,982
Defined benefit	2,064
Total defined contribution	918
401(k)	848
ESOP	70
Employer DB contributions	65
Benefit payments	81
Employer DC contributions	54
Defined benefit asset mix:	
Stocks	69%
Fixed income	29%
Cash equivalents	1%
Real estate equity	1%
Defined contribution asset mix:	
Company stock	9%
Other stock	17%
GICs/BICs	74%

LEXINGTON, Mass. — As of Sept. 30, Raytheon Co.'s total employee benefit assets decreased 2.2% to $2.982 billion from $3.05 billion a year earlier. Defined benefit assets decreased 9.8% during the same period, to $2.064 billion from $2.288 billion. Defined contribution assets increased

20.5%, to $918 million from $762 million.

Equity managers: Domestic — Aiyer Investments; Bankers Trust; Batterymarch; Dewey Square; INVESCO; Loomis, Sayles; Matrix; PanAgora; Rosenberg; State Street Research; and Sun Bank.

Fixed-income managers: Loomis, Sayles and Richmond Capital.

Real estate managers: Aetna and John Hancock.

The master trustee is Boston Safe.

Key personnel overseeing the investment management of the fund are Herbert Deitcher, senior vice president-treasurer; W. Bruce Livingston, manager-employee benefits financing; and Steven S. DeMeo, senior benefits financing specialist.

Employee Retirement System of Rhode Island

($ millions)	
Total assets	2,322
Defined benefit	2,322
Employer DB contributions	125
Benefit payments	120
Internally managed assets	205
Hedging devices used:	
Stock options	
Bond options	
Defined benefit asset mix:	
Stocks	42.7%
Fixed income	32.9%
Cash equivalents	17.6%
Real estate equity	4.2%
Other	2.6%

PROVIDENCE, R.I. — As of Sept. 30, the Employee Retirement System of Rhode Island's total employee benefit assets increased 1% to $2.322 billion from $2.3 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Bankers Trust; Boston Co.; Fleet National Bank; and Provident.

International — Alliance; Nomura; and Schroder.

Fixed-income managers: Domestic — Brown Brothers Harriman; Fidelity Management; and Fleet National.

Real estate managers: Aetna; Heitman; Lehndorff & Babson; and Phoenix.

Other manager: Crossroads.

State Street Bank is the master trustee and the global custodian; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Anthony J. Solomon, general treasurer; Jerome F. Williams, deputy general treasurer; and Stephen F. Iafrate, fiscal manager/administrative officer.

RJR Nabisco Inc.

($ millions)	
Total assets	3,364
Defined benefit	2,400
Total defined contribution	964
Defined benefit asset mix:	
Stocks	57%
Fixed income	30%
Cash equivalents	6%
Real estate equity	7%

NEW YORK — As of Sept. 30, RJR Nabisco Inc.'s total employee benefit assets decreased 18% to $3.364 billion from $4.1 billion a year earlier. Defined benefit assets decreased 11.1% during the same period, to $2.4 billion from $2.7 billion. Defined contribution assets decreased 31.1%, to $964 million from $1.4 billion.

The key person overseeing the investment management of the fund is John W. MacMurray, senior director-pension administration.

Rockwell International Corp.

($ millions)	
Total assets*	9,715
Defined benefit	7,115
Thrift or savings	2,600
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
P&I estimate	

PITTSBURGH — As of Sept. 30, Rockwell International Corp.'s total employee benefit assets were $9.715 billion, according to a *Pensions & Investments* estimate. Defined benefit assets are estimated at $7.115 billion, and defined contribution assets, $2.6 billion.

The trustees for the savings plans are First Interstate Bank of California and Vanguard.

Key personnel overseeing the investment management of the fund are Lee H. Cramer, vice president and treasurer, and Susan Leathers, director-pension asset management.

S

San Francisco City & County Employees' Retirement System

($ millions)	
Total assets*	4,331
Defined benefit	4,179
401(k)	152
Employer DB contributions	229
Benefit payments	199
Employer DC contributions	na
as of June 30, 1990	
Internally managed assets:	
Total DB	1,950
Defined benefit asset mix:	
Stocks	32%
Fixed income	51%
Cash equivalents	11.7%
Real estate equity	5%
Other	0.3%

SAN FRANCISCO — As of June 30, the San Francisco City & County Employees' Retirement System's total employee benefit assets increased 10.6% to $4.331 billion from $3.916 billion a year earlier. Defined benefit assets increased 10.2% during the same period, to $4.179 billion from $3.792 billion. Defined contribution assets increased 21.6%, to $152 million from $125 million.

Equity managers: Domestic — Hanson; McCullough Andrews & Cappiello; Nicholas-Applegate; RCM; and Trinity.

International — Capital Guardian and Oechsle.

Fixed-income managers: Domestic — Axe-Houghton; Caywood-Christian; MacKay-Shields; Miller, Anderson & Sherrerd; Scudder, Stevens & Clark; and TCW.

International — Brinson Partners and Warburg Investment.

Real estate managers: Coldwell Banker; JMB; Lehndorff & Babson; Metric; RREEF; and Schroder.

Venture capital: Crossroads.

The master trustee and global custodian is Bankers Trust; the investment consultants are Callan; Townsend; and Lewis, Bailey.

Key personnel overseeing the investment management of the fund are Kenneth L. Shaffer, chief investment officer; and Carolyn Hamilton and Jack Montgomery, portfolio managers.

Sears, Roebuck and Co.

($ millions)	
Total assets	7,186
Defined benefit	2,502
Defined contribution	4,684
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Internally managed assets:	
Total DB	2,048
Total DC	4,518
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	56%
Fixed income	29%
Cash equivalents	5%
Real estate equity	4%
Other	6%
Defined contribution asset mix:	
Company stock	39%
Other stock	22%
Fixed income	15%
Cash equivalents	24%

CHICAGO — As of Sept. 30, Sears, Roebuck and Co.'s total employee benefit assets decreased 11.3% to $7.186 billion from $8.101 billion a year earlier. Defined benefit assets decreased 15.9% during the same period, to $2.502 billion from $2.974 billion. Defined contribution assets, in a profit-sharing plan with a 401(k) feature, decreased 8.6%, to $4.684 billion from $5.127 billion.

Equity managers: Domestic — Rosenberg Institutional; Sears Investment Management; and State Street.

International — Acadian; Capital Guardian; HD International; Oechsle; and State Street.

Fixed-income manager: Sears Investment Management.

Real estate manager: AEW.

The master trustee and global custodian is Continental Bank.

Key personnel overseeing the investment management of the fund, all with Sears Investment Management Co., are David V. Dootson, president; Michael Norton, vice president-fixed income; James M. Smith, vice president-venture capital; and David H. Williams, vice president-equities.

Top 200 funds with assets in venture capital*

Fund	($ millions)
Washington State Board	407
AT&T	406
Ameritech	305
State of Michigan	257
Minnesota State Board	255
General Electric	241
GTE	178
University of California	156
Los Angeles County	145
Illinois Teachers	119
Pacific Telesis	107
New York State & Local	103
Unisys	98
United Technologies	90
Sears, Roebuck	87
Westinghouse Electric	86
Chicago Municipal	84
Southwestern Bell	82
Illinois Municipal	79
Honeywell	77
Du Pont	71
Pennsylvania State	69
Pennsylvania Schools	68
Colorado Public Employees	66
Connecticut Trust Funds	66
Delaware State	66
Exxon	65
Oregon Public Employes	65
Delta Air Lines	60
Wisconsin State Board	60
Chevron	55
ALCOA	50
Ford Motor	50
S. California Edison	50
Owens-Illinois	43
American Electric Power	41
Utah State	40
Iowa Public Employees	38
Atlantic Richfield	37
BP America	35
Illinois State Board	35
Philip Morris	35
Prudential Insurance	35
Deere	34
Chicago Police	32
World Bank	32
Virginia Retirement	31
Grumman	29
Ohio State Teachers	28
New York State Teachers	26
Ohio School Employees	25
Xerox (DB)	21
Nat'l Electrical Contractors	20
J.C. Penney	19
TRW	19
North Carolina	18
Ohio Public Employees	17
Johnson & Johnson	14
Minnesota Mining & Mfg.	12
Ohio Police & Firemen	12
Rhode Island	12
San Francisco City/County	12
Nevada Public Employees	10
Textron	9
California State Teachers	7
Armco	6
Inland Steel	5
Tenneco	5
S. New England Telephone	3
Xerox (DC)	2
Total	**5,022**

*All are defined benefit funds unless otherwise noted

International Sheet Metal Workers

($ millions)	
Total assets*	1,686
Defined benefit	1,686
Employer DB contributions	83
Benefit payments	na
From Money Market Directory	

WASHINGTON — As of June 30, the International Sheet Metal Workers' total employee benefit assets increased 7% to $1.686 billion from $1.576 billion a year earlier, according to the Money Market Directory. All assets are defined benefit.

The key person overseeing the investment management of the fund is Walter Carlough, administrator.

Shell Oil Co.

($ millions)	
Total assets*	7,507
Defined benefit	3,660
Total defined contribution	3,847
Thrift or savings	3,462
401(k)	385
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
P&I estimate	

HOUSTON — As of Sept. 30, *Pensions & Investments* estimates Shell Oil Co.'s employee benefit assets totaled $7.507 billion. The estimate is based on $7.811 billion the 1991 Money Market Directory reports the company having as of December 1989. The estimate represents a 4.2% decrease from the $7.84 billion Shell reported as of Sept. 30, 1989. Defined benefit assets decreased 1.1% to an estimated $3.660 billion from $3.7 billion. Defined contribution assets declined 7% to an estimated $3.847 billion from $4.14 billion.

Leonard S. Chaikind, pension administrator, oversees investment management of the fund.

South Carolina Retirement System

($ millions)	
Total assets*	7,728
Defined benefit	7,728
Employer DB contributions	329
Benefit payments	345
as of June 30, 1990	
Internally managed assets	7,728
Defined benefit asset mix:	
Fixed income	93%
Cash equivalents	7%

COLUMBIA, S.C. — As of June 30, the South Carolina Retirement System's total employee benefit assets increased 9.3% to $7.728 billion from $7.072 billion a year earlier. All assets are defined benefit and managed internally.

Key personnel overseeing the investment management of the fund are Grady L. Patterson, state treasurer; Sandy Huey, deputy state treasurer; and Chuck Sanders, senior assistant state treasurer.

Southern Co. Services Inc.

($ millions)	
Total assets	3,350
Defined benefit	2,400
Total defined contribution	950
401(k)	700
ESOP	250
Employer DB contributions	0
Benefit payments	70
Employer DC contributions	45
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	

ATLANTA — As of Sept. 30, Southern Co. Services Inc.'s total employee benefit assets increased 8.1% to $3.35 billion from $3.1 billion a year earlier. Defined benefit assets remained the same at $2.4 billion. Defined contribution assets increased 35.7%, to $950 million from $700 million.

Equity managers: Domestic — AmSouth Bank; INVESCO; Jundt/Capen; Lieber; Miller, Anderson & Sherrerd; Northern Capital Management; Spears, Benzak, Salomon & Farrell; and Strong/Corneliuson.

Fixed-income managers: Domestic — Discount Corp. Advisers; First Wachovia; and Trusco Capital.

The master trustee is Bankers Trust.

The key person overseeing the investment management of the fund is David Prince, assistant treasurer.

Annuity Board of the Southern Baptist Convention

($ millions)	
Total assets	2,680
Defined benefit	770
Total defined contribution	1,910
Other	1,910
Employer DB contributions	0
Benefit payments	32
Employer DC contributions	na
Internally managed assets:	
Total DB	56
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	48.1%
Fixed income	36.8%
Cash equivalents	0.2%
Real estate equity	2.5%
Mortgages	2.3%
GICs/BICs	10.1%
Defined contribution asset mix:	
Stock	19%
Fixed income	14%
Cash equivalents	2%
GICs/BICs	65%

DALLAS — As of Sept. 30, the Annuity Board of the Southern Baptist Convention's total employee benefit assets increased 4.7% to $2.68 billion from $2.559 billion a year earlier. Defined benefit assets decreased 6.3% during the same period, to $770 million from $822 million. Defined contribution assets, all in 403(b) plans, increased 10%, to $1.91 billion from $1.737 billion.

Equity managers: Domestic — Barrow, Hanley; Capital Guardian; Eagle; GAMCO; Ganucheau, Stupfel; JMC; Luther King; Munder; Provident; RCM; Sasco; Scudder, Stevens; Sirach.

International — PCM International and Swiss Bank.

Fixed-income managers: Sanford C. Bernstein; Loomis, Sayles; Putnam; J.P. Morgan; STW; and Western Asset.

The master trustee and global custodian is Northern Trust; the investment consultant is SEI.

John R. Jones, senior vice president-director of investments, oversees investment management of the fund.

Southern California Edison

($ millions)	
Total assets	2,300
Defined benefit	1,500
401(k)	800
Employer DB contributions	50
Benefit payments	70
Employer DC contributions	40
Internally managed assets:	
Total DB	125
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	62%
Fixed income	23%
Cash equivalents	1%
Real estate equity	5%
GICs/BICs	5%
Venture capital	4%
Defined contribution asset mix:	
Company stock	76%
Other stock	6%
Fixed income	2%
Cash equivalents	4%
GICs/BICs	7%
Balanced asset fund	5%

ROSEMEAD, Calif.— As of Sept. 30, Southern California Edison's total employee benefit assets decreased 3.4% to $2.3 billion from $2.38 billion a year earlier. Defined benefit assets decreased 5.1% during the same period, to $1.5 billion from $1.58 billion. Defined contribution assets remained the same at $800 million.

Equity managers: Domestic — DFA; Dodge & Cox; Hotchkis and Wiley; Jundt/Capen; Mellon; Pacific Financial; RCM; Rosenberg Institutional; and Sit.

International - Acadian; Battery-

march; TCW; and Warburg.

Fixed income managers: Domestic — NCM, PIMCO and RCM.

Real estate managers: Equitable; JMB; LaSalle; Pacific Mutual; and TCW.

Options manager: MCO.

Overwriting manager: Bankers Trust.

Cash manager: Payden & Rygel.

The master trustee is Security Pacific; the global custodian is Mitsubishi; the investment consultant is Frank Russell.

Rick Yamamoto, manager-investments, is the key person overseeing the investment management of the fund.

Southern California UFCW & Food Employers Joint Pension Trust Fund

	($ millions)
Total assets	2,073
Defined benefit	2,073
Employer DB contributions	125
Benefit payments	117
Internally managed assets	30
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	35%
Fixed income	45%
Cash equivalents	3%
Real estate equity	5%
GICs/BICs	12%

CYPRESS, Calif. — As of Sept. 30, the Southern California United Food and Commercial Workers & Food Employers Joint Pension Trust Fund's total employee benefit assets decreased 2.8% to $2.073 billion from $2.133 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Cramblitt & Carney; Lazard Freres; Oppenheimer; TCW; and Wells Fargo.

Fixed-income managers: Domestic — PIMCO; PIMCO Futures; Putnam; and Weiss, Peck & Greer.

Real estate managers: LaSalle; Lehndorff & Babson; McMorgan; Prudential; Smith Barney Birtcher; and TCW.

Short-term manager: Patterson Capital.

GIC manager: Morley Capital.

The master trustee is First Interstate; the investment consultants are Institutional Property Consultants and R.H. Kuhns.

Key personnel overseeing the investment management of the fund are P. Colleen Thompson, administrator, and Joel F. Meltz, controller.

Southern New England Telephone Co.

	($ millions)
Total assets	1,729
Defined benefit	1,460
Total defined contribution	269
Employer DB contributions	0
Benefit payments	61
Employer DC contributions	11
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	54%
Fixed income	35%
Cash equivalents	1%
Real estate equity	7%
Other	3%
Defined contribution asset mix:	
Company stock	22%
Other stock	5%
GICs/BICs	73%

NEW HAVEN, Conn. — As of Sept. 30, Southern New England Telephone Co.'s total employee benefit assets decreased 9.6% to $1.729 billion from $1.912 billion a year earlier. Defined benefit assets decreased almost 11% during the same period to $1.46 billion from $1.64 billion. Defined contribution assets decreased 5.1% to $269 million from $272 million.

Equity managers: Domestic — American National Bank; Analytic Investment; Barrow, Hanley; Connecticut National Bank; Moran Asset; Wellington; and Wells Fargo.

International — Mercator; PCM; and Wells Fargo.

Fixed-income managers: Domestic — Connecticut National; Dreyfus; Equitable; Putnam; STW; and Wells Fargo.

Real estate managers: CIGNA; JMB; LaSalle; Schroder; and Sentinel.

Other managers: Columbine Venture Funds; Hellman & Friedman; Recovery Equity Partners; Triumph Capital; and Rimco Oil & Gas.

The master trustees are Boston Safe Deposit for the defined benefit plan and Bankers Trust for the defined contribution plans. The global custodian is Morgan Stanley for the defined benefit plan.

The key person overseeing the investment management of the fund is Katherine Griswold, director-pension fund.

Southwestern Bell Corp.

	($ millions)
Total assets*	8,303
Defined benefit	7,082
Defined contribution	1,221
Employer DB contributions	0
Benefit payments	278
Employer DC contributions	5
*as of June 30, 1990	
Defined benefit asset mix:	
Stocks	60%
Fixed income	28%
Cash equivalents	1%
Real estate equity	9%
Other	2%
Defined contribution asset mix:	
Company stock	41%
Other stock	19%
Fixed income	3%
GICs/BICs	34%
Loans	3%

ST. LOUIS — As of June 30, Southwestern Bell Corp.'s total employee benefit assets decreased 0.4% to $8.303 billion from $8.334 billion as of Sept. 30, 1989. Defined benefit assets decreased 1.2% during the same period, to $7.082 billion from $7.166 billion. Defined contribution assets increased 4.5% to $1.221 billion from $1.168 billion.

Equity managers: Domestic — Goldman, Sachs; Franklin; Geocapital; Jennison; NFJ Investment; Nicholas-Applegate; Pilgrim Baxter Greig; Rosenberg; Sasco; Southeastern Asset; and Wells Fargo Nikko.

International — IDS; Nomura; and Wells Fargo Nikko.

Fixed-income managers: Domestic — Jennison and Mississippi Valley.

Real estate manager: Heitman.

Other managers: Bigler/Cross-roads; Brinson; and NCNB-Texas.

The master trustee is NCNB-Texas; the global custodian is Chase Manhattan; the investment consultant is Buck.

Key personnel overseeing the investment management of the fund are M.A. Devine, director-pension investments, and C. Weaver, director-pension fund.

State Farm Mutual Automobile Insurance Co.

	($ millions)
Total assets	3,240
Defined benefit	2,498
401(k)	742
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na

BLOOMINGTON, Ill. — As of Sept. 30, State Farm Mutual Automobile Insurance Co. reported total employee benefit assets of $3.24 billion, an increase of 5.1% from a year earlier when its assets were estimated to be $3.084 billion. It reported defined benefit assets of $2.498 billion and defined contribution assets of $742 million, both as of Sept. 30. No comparative breakdown of the two types of funds was available for the previous year.

Reprints of articles appearing in *Pensions & Investments* are available.
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T

Teachers Insurance and Annuity Association - College Retirement Equities Fund

	($ millions)
Total assets	83,100
Total defined contribution	83,100
Other	83,100
Employer DC contributions	3,700
Internally managed assets	83,100
Defined contribution asset mix:	
Other stock	36.9%
Fixed income	51.4%
Cash equivalents	4.4%
Real estate equity	5.5%
Other	1.8%

NEW YORK — As of Sept. 30, the Teachers Insurance and Annuity Association — College Retirement Equities Fund's total employee benefit assets increased 2.6% to $83.1 billion from $81 billion a year earlier. All assets are in annuity plans, and are managed internally.

For TIAA, the master trustees are Citibank and Morgan Guaranty; for CREF, the master trustees are Bankers Trust and Morgan Guaranty. The global custodians are Chase Manhattan and Bankers Trust.

Key personnel overseeing the investment management for TIAA are J. Daniel Lee Jr., executive vice president; and David B. Bullet and John A. Somers, senior vice presidents. Key personnel overseeing CREF investments are James S. Martin, executive vice president; and C. Oscar Morong Jr. and Virgil H. Cumming, senior vice presidents.

Teamsters, Central States, Southeast and Southwest Areas Pension Fund

	($ millions)
Total assets	9,398
Defined benefit	9,398
Employer DB contributions	735
Benefit payments	963
Internally managed assets	69
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	31.9%
Fixed income	52.7%
Cash equivalents	15.3%
Real estate equity	0.1%

ROSEMONT, Ill. — As of Sept. 30, the Teamsters, Central States, Southeast and Southwest Areas Pension Fund's total employee benefit assets decreased 4.6% to $9.398 billion from $9.849 billion a year earlier. All assets are defined benefit.

Equity managers: BEA; Equitable; Hellman-Jordan; INVESCO; Lynch & Mayer; Mellon; Provident; Putnam; TCW; and Wells Fargo Nikko.

Fixed-income managers: Bankers Trust; Fiduciary Trust; Lincoln Capital; MacKay Shields; Mellon; Miller, Anderson; and T. Rowe Price.

Real estate managers: Eastdil; Karsten; O'Connor; and Yarmouth.

The master trustee is Mellon; the investment consultant is Lewis, Bailey.

Morgan Stanley is named fiduciary of the fund. Key personnel at Teamsters, Central States overseeing the investment management of the fund are Robert M. Warner, director-financial services, and Mark F. Angerame, manager-financial group.

Teamsters, Western Conference Pension Trust

	($ millions)
Total assets	9,292
Defined benefit	9,292
Employer DB contributions	540
Benefit payments	640
Hedging devices used:	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	17.1%
Fixed income	54.2%
Cash equivalents	3.7%
Real estate equity	8.5%
Mortgages	0.5%
GICs/BICs	0.7%
Annuities	15.3%

SEATTLE — As of Sept. 30, the Western Conference of Teamsters Pension Trust's defined benefit assets increased 2.3%, to $9.292 billion from the $9.084 billion it was estimated the fund had a year earlier.

Equity managers: Domestic — Fidelity; Mellon; and Prudential.

Fixed income managers: PIMCO and Prudential.

Real estate managers: Aetna; AEW; Phoenix Mutual; and Prudential.

The consultant is A.D. Biller.

Key personnel overseeing the investment management of the fund are Owen Bennett, co-chairman; Joe Ballew, co-chairman; and John Bacon, chairman-investment committee.

Tenneco Inc.

	($ millions)
Total assets	2,824
Defined benefit	1,925
Thrift or savings	899
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Internally managed assets:	
Total DC	838
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	66%
Fixed income	33%
Cash equivalents	2%
Defined contribution asset mix:	
Company stock	17%
Other stock	4%
Fixed income	3%
Cash equivalents	76%

HOUSTON — As of Sept. 30, Tenneco Inc.'s total employee benefit assets decreased 1.8% to $2.824 billion from $2.877 billion a year earlier. Defined benefit assets decreased 7.2% during the same period, to $1.925 billion from $2.074 billion. Defined contribution assets increased 12%, to $899 million from $803 million.

Equity managers: Domestic — Sanford C. Bernstein; Capstone; Delaware; Hotchkis & Wiley; IDS; and Fayez Sarofim.

International — Deutsche Asset and Morgan Stanley.

Fixed-income managers: Domestic — Capstone; Fischer, Francis; J.P. Morgan; State Street Research; and STW.

Other managers: Bridge Capital.

The master trustee is Bankers Trust; the investment consultant is Callan.

The key person overseeing the investment management of the fund is Richard A. Robinson, executive director-investments.

Tennessee Consolidated Retirement System

	($ millions)
Total assets	8,148
Defined benefit	8,148
Employer DB contributions	160
Benefit payments	40
Internally managed assets	8,148
Defined benefit asset mix:	
Stocks	31.1%
Fixed income	55.3%
Cash equivalents	5.3%
Other	8.3%

NASHVILLE, Tenn. — As of Sept. 30, the Tennessee Consolidated Retirement System's total employee benefit assets increased 0.9% to $8.148 billion from $8.075 billion a year earlier. All assets are defined benefit and managed internally.

The master custodian and global custodian is Chase; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Charles H. Webb, chief investment officer; Marshall Cox, bond portfolio manager; and Jeremy Conlin, stock portfolio manager.

Tennessee Valley Authority Retirement System

	($ millions)
Total assets	2,834
Defined benefit	2,623

Top 200 funds with assets in mortgage-backed securities

Defined benefit

Fund	($ millions)
California Employees	7,600
New York State & Local	4,543
Texas Teachers	3,700
California State Teachers	3,689
New Jersey	3,656
Ohio Employees	3,400
Ohio State Teachers	3,400
Pennsylvania School	2,445
Teamsters, Central States	2,000
North Carolina	1,854
Texas Employees	1,590
South Carolina	1,552
New York State Teachers	1,443
Du Pont	1,348
State of Michigan	1,298
General Electric	1,200
Los Angeles County	1,121
Bethlehem Steel	1,030
Missouri Public School	928
Washington State Board	901
USX	810
Colorado Employees	710
Tennessee Consolidated	630
Nevada Employees	623
Iowa Employees	591
Ohio School Employees	580
Connecticut Trust Funds	500
Alabama Retirement	487
Louisiana Teachers	400
Ohio Police & Firemen	380
Kentucky Teachers	375
Utah State	363
Oklahoma Teachers	350
Illinois State Board	340
Maryland State	335
Armco	333
General Dynamics	328
Indiana Employees	325
Louisiana Employees	260
Los Angeles Fire & Police	253
Boilermaker-Blacksmith	241
Exxon	198
Los Angeles Water & Power	182
New Mexico Employees	180
Chicago School	176
Chicago Municipal	171
New York City	164
Delaware State	138
Commonwealth Edison	121
Bakery & Confectionery	114
Ameritech	106
Grumman	103
United Methodist Church	103
Unisys	100
Tennessee Valley Authority	99
Monsanto	89
Idaho Employees	72
Delta Air Lines	50
Atlantic Richfield	47
K mart	46
Minnesota Mining & Mfg.	41
Kansas Employees	39
Presbyterian Church	30
Owens-Illinois	25
Operating Engineers	20
Arkansas Teachers	19
American Stores	9
Hawaii Employees	7
Nat'l Rural Electric Co-op	5
Total	**60,398**

Defined contribution

Fund	($ millions)
TIAA-CREF	2,200
Texas County & District	1,456
General Electric	500
Evangelical Lutheran	340
Indiana Teachers	300
Indiana Employees	129
Halliburton	119
Bechtel Power	101
American Stores	100
United Methodist Church	85
Oklahoma Teachers	42
UMWA	2
Total	**5,273**

Total defined contribution	211
Thrift or savings	136
401(k)	75
Employer DB contributions	44
Benefit payments	182
Employer DC contributions	0
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	53%
Fixed income	40%
Cash equivalents	6%
GICs/BICs	1%
Defined contribution asset mix:	
Other stock	60%
Fixed income	40%

KNOXVILLE, Tenn. — As of Sept. 30, the Tennessee Valley Authority Retirement System's total employee benefit assets decreased 8.3% to $2.834 billion from $3.09 billion a year earlier. Defined benefit assets decreased 9.4% during the same period, to $2.623 billion from $2.894 billion. Defined contribution assets increased 7.7%, to $211 million from $196 million.

Equity managers: Domestic — DIA; Geewax, Terker; Mellon Capital; Morgan Grenfell; NCM; Rosenberg Institutional; and Sun Bank.

Fixed-income managers: Domestic — Duff & Phelps; W.R. Huff; Lord, Abbett; and PIMCO.

The master trustee is Mellon Bank; the investment consultant is Wilshire.

Larry Edwards, executive secretary, oversees the investment management of the fund.

Texaco Inc.

	($ millions)
Total assets	3,300
Defined benefit	1,300
Total defined contribution	2,000
ESOP	500
Other	1,500
Employer DB contributions	58
Benefit payments	140
Employer DC contributions	na
Internally managed assets:	
Total DB	110
Hedging devices used:	
Stock options	
Stock index futures	

WHITE PLAINS, N.Y. — As of Sept. 30, Texaco Inc.'s total employee benefit assets increased 3.1% to $3.3 billion from $3.2 billion a year earlier. Defined benefit assets were unchanged at $1.3 billion. Defined contribution assets increased 5.3% to $2 billion from $1.9 billion.

Equity managers: Alliance; Mellon Capital; J.P. Morgan; and State Street Bank.

Fixed-income managers: W.R. Lazard and J.P. Morgan.

Real estate managers: Aetna; Copley; Equitable; J.P. Morgan; Prudential; and Travelers.

The master trustee is Chase Manhattan; the investment consultant is Wilshire.

Shelby Faber, financial director, oversees investment management of the fund.

Texas County and District Retirement System

	($ millions)
Total assets	2,297
Defined contribution	2,297
Employer DC contributions	na
Internally managed	2,297
Defined contribution asset mix:	
Fixed income	99%
Cash equivalents	1%

AUSTIN, Texas — As of Sept. 30, the Texas County and District Retirement System's total assets increased 14.9% to $2.297 billion from $2 billion a year earlier. All assets are defined contribution and managed internally.

Key personnel overseeing the investment management of the fund are J. Robert Brown, executive director, and Ronald Schultz, investment consultant.

Employees Retirement System of Texas

	($ millions)
Total assets	6,242
Defined benefit	6,242
Employer DB contributions	174
Benefit payments	250
Internally managed assets	6,242
Defined benefit asset mix:	
Stocks	26%
Fixed income	73%
Cash equivalents	1%

AUSTIN, Texas — As of Sept. 30, the Employees Retirement System of Texas' total employee benefit assets increased 4.6% to $6.242 billion from $5.969 billion a year earlier. All assets are defined benefit and managed internally.

Equity adviser: INVESCO.

Fixed-income adviser: Duff & Phelps.

The master custodian is NCNB Texas.

Key personnel overseeing the investment management of the fund are Charles D. Travis, executive director, and Nancy G. Goerdel, deputy director for investments.

Texas Municipal Retirement System

	($ millions)
Total assets*	2,400
Defined contribution	2,400
Employer DC contributions	na
*book value	
Internally managed assets	2,400
Defined contribution asset mix:	
Fixed income	100%

AUSTIN, Texas — As of Sept. 30, The Texas Municipal Retirement System's total employee benefit assets increased 9.1% to $2.4 billion from $2.2 billion a year earlier. All assets are defined contribution and managed internally.

The master custodian is First City Bank, Austin; the investment consultant is Duff & Phelps.

Key personnel overseeing the investment management of the fund are Jimmie L. Mormon, director, and Preston G. Craig, investment officer.

Teacher Retirement System of Texas

	($ millions)
Total assets	23,734
Defined benefit	23,724
Employer DB contributions	714
Benefit payments	893
Internally managed assets	23,734
Defined benefit asset mix:	
Stocks	41.3%
Fixed income	48%
Cash equivalents	0.8%
Real estate equity	9.9%

AUSTIN, Texas — As of Sept. 30, the Teacher Retirement System of Texas' total employee benefit assets increased 1% to $23.734 billion from $23.5 billion a year earlier. All assets are in defined benefit plans and are internally managed.

The master custodian is Chemical Bank; the investment consultant is Wellington.

Key personnel overseeing the investment management of the fund are Jack Cooper, acting chief investment officer; Herman Martina, investment officer-fixed income; George Reagan, investment officer-equities; Gene Reichman, investment officer-real estate.

Textron Inc.

	($ millions)
Total assets	2,962
Defined benefit	2,108
Total defined contribution	854
Profit-sharing	204
Thrift or savings	11
ESOP	639
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Internally managed assets:	
Total DB	1,845
Defined benefit asset mix:	
Stocks	25%
Fixed income	51%
Cash equivalents	8%
Real estate equity	9%
Other	7%

PROVIDENCE, R.I. — As of Sept. 30, Textron Inc.'s total employee benefit assets decreased 5.1% to $2.962 billion from $3.121 billion as of Oct. 31, 1989. Defined benefit assets decreased 9.1% during the same period, to $2.108 billion from $2.319 billion. Defined contribution assets increased 6.5%, to $854 billion from $802 billion.

Equity managers: Domestic — Sanford Bernstein; Delaware; and Wellington.

Real estate managers: Prudential.

Other managers: Advanced Technology Venture; Advent International; Amgo; Foothill Partners; MMG Patricoff; and T. Rowe Price.

The master trustee is Bankers Trust.

The key person overseeing the investment management of the fund is John D. Lemery, president of Textron Investment Management.

Trans World Airlines Inc.

	($ millions)
Total assets	2,282
Defined benefit	1,012
Total defined contribution	1,270
401(k)	181
ESOP	5
Other	1,084
Employer DB contributions	41
Benefit payments	38
Employer DC contributions	43
Internally managed assets:	
Total DB	617
Defined benefit asset mix:	
Stocks	34%
Fixed income	18%
Cash equivalents	40%
Real estate equity	2%
GICs/BICs	6%
Defined contribution asset mix:	
Other stock	52%
Fixed income	1%
Cash equivalents	16%
GICs/BICs	21%
Real estate	*10%

KANSAS CITY, Mo. — As of Sept. 30, Trans World Airlines Inc.'s total employee benefit assets decreased 7.6% to $2.282 billion from $2.47 billion a year earlier. Defined benefit assets decreased 4.1% during the same period, to $1.012 billion from $1.055 billion. Defined contribution assets decreased 10.2%, to $1.27 billion from $1.415 billion.

Equity managers: Domestic — Estabrook; Federated Investment; Fidelity Investments; Fort Hill; Frontier; GAMCO; Investors Research; J.P. Morgan; McGlinn; Mellon Capital; Shields; State Street Bank; and Wells Fargo Nikko.

International — SBC; State Street Bank; Vanguard Group; and WorldInvest.

Fixed-income managers: Domestic — Estabrook; Fidelity Investments; Fort Hill; GAMCO; McGlinn; Shields; and Wells Fargo Nikko.

Real estate managers: Aetna; Citicorp; Coldwell Banker; INVESCO; J.P. Morgan; NCNB; State Street Bank; and TCW Realty.

GIC/BIC managers: Aetna; Boston Co.-Morley Capital; and PRIMCO.

The master trustee and global custodian is Boston Safe.

The key person overseeing the investment management of the fund is Gary Dilley, director-pension finance.

Travelers Insurance Cos.

	($ millions)
Total assets	1,980
Defined benefit	1,469
Total defined contribution	511
401(k)	447
Other	64
Employer DB contributions	46
Benefit payments	55
Employer DC contributions	12
Internally managed assets:	
Total DB	1,363
Total DC	511
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	47%
Fixed income	11%
Real estate equity	4%
GICs/BICs	35%
Private placements	3%
Defined contribution asset mix:	
Company stock	25%
Other stock	5%
Fixed income	70%

HARTFORD, Conn. — Travelers Insurance Cos.' total employee benefit assets declined 4.6% to $1.98 billion from $2.075 billion a year earlier. Defined benefit assets declined 5.5% during the same period, to $1.469 billion from $1.554 billion. Defined contribution assets declined 1.9%, to $511 billion from $521 billion.

Equity managers: Domestic — TIMCO.

International — TIMCO, Dillon Read International.

Fixed-income managers: Domestic — Travelers Keystone.

International — TIMCO.

Real estate managers: Travelers Realty Investment.

Other manager: Travelers securities department.

The master trustee is Connecticut National Bank. The global custodian is

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*Year ending third-quarter performance for the International Common Stock Fund (offered under the Confederation Life Insurance Company managed fund contract) as reported by the Frank Russell Company (non-U.S. equity universe). This fund was previously managed by Confederation Life using the same investment approach and personnel. Past performance is no guarantee of future results.

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Key personnel overseeing the investment management of the fund are Thomas O. Thorsen, vice chairman and chief financial officer; Richard J. Shima, vice chairman and chief investment officer; and Thomas F. Keating, senior vice president.

TRW Inc.

	($ millions)
Total assets	2,783
Defined benefit	1,848
401(k)	935
Employer DB contributions	46
Benefit payments	140
Employer DC contributions	34
Internally managed assets:	
Total DB	108
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	55.6%
Fixed income	36.3%
Cash equivalents	8.1%
Defined contribution asset mix:	
Company stock	41.3%
Other stock	17.5%
GICs/BICs	41.2%

CLEVELAND — As of Sept. 30, TRW Inc.'s total employee benefit assets decreased 10.1% to $2.783 billion from $3.096 billion a year earlier. Defined benefit assets decreased 12.1% during the same period, to $1.848 billion from $2.103 billion. Defined contribution assets decreased 5.8% to $935 million from $993 million.

Equity managers: Domestic — Alliance; Baring America; Sanford Bernstein; Campbell; Eagle, Investment Counselors of Maryland; Westwood; and Wilshire.

International — Baring Brothers; Ivory & Sime; and PanAgora.

Fixed-income managers: Domestic — Hoisington; MacKay-Shields; and PIMCO.

International — J.P. Morgan and Morgan-Grenfell.

The master trustee and global custodian is Boston Safe Deposit; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Robert M. Hamje, president of TRW Investment Management Co., and Edward N. Button, vice president of TRW Investment.

U

Union Carbide Corp.

	($ millions)
Total assets	2,608
Defined benefit	1,944
Total defined contribution	664
Thrift or savings	447
401(k)	217
Employer DB contributions	53
Benefit payments	95
Employer DC contributions	na
Internally managed assets:	
Total DB	1,912
Total DC	634
Defined benefit asset mix:	
Stocks	20%
Fixed income	54%
Cash equivalents	14%
Real estate equity	3%
Mortgages	5%
Annuities	2%
Private placements	2%
Defined contribution asset mix:	
Company stock	12.7%
Other stock	4.5%
GICs/BICs	76%
Other	6.8%

DANBURY, Conn.— As of Sept. 30, Union Carbide Corp.'s total employee benefit assets decreased 3.2% to $2.608 billion from $2.693 billion a year earlier. Defined benefit assets decreased 7.2% during the same period, to $1.944 billion from $2.095 billion. Defined contribution assets increased 11%, to $664 million from $598 million.

Benefit Capital Management Corp., a subsidiary of Union Carbide, handles the management of the defined benefit assets.

Equity manager: Domestic — Fidelity Investments (defined contribution).

GIC manager: Met Life (defined contribution).

The master trustee is Manufacturers Hanover Trust.

Key personnel overseeing the investment management of the fund, all Benefit Capital executives, are Michael F. Hoben, president; and Robert Burstein and Lawrence R. Fuller, senior vice presidents.

Unisys Corp.

	($ millions)
Total assets	4,534
Defined benefit	2,811
401(k)	1,723
Employer DB contributions	15
Benefit payments	145
Employer DC contributions	46
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	48.5%
Fixed income	11.4%
Real estate equity	11.9%
BICs/GICs	6%
Other	22.2%
Defined contribution asset mix:	
Company stock	3.3%
Other stock	21.7%
Cash equivalents	5.1%
GICs/BICs	69.9%

BLUE BELL, Pa. — As of Sept. 30, Unisys Corp.'s total employee benefit assets decreased 9.7% to $4.534 billion from $5.022 billion a year earlier. Defined benefit assets decreased 12.3% during the same period, to $2.811 billion from $3.206 billion. Defined contribution assets decreased 5.1%, to $1.723 billion from $1.816 billion.

Equity managers: Domestic — Fred Alger; Baker, Nye; Bankers Trust; BEA; Chase; Concord; Geewax Terker; Independence Investment; Jacobs Levy; Lazard Freres; MTH Asset Management; Nicholas-Applegate; NWQ; Pacific Financial Research; PRIMECAP; Rosenberg; Thomson, Horstmann & Bryant; TIMCO; Twin Capital; United Capital; Walsh Greenwood; and Wells Fargo.

International — County Natwest; HD International; Mercator; Parametric; TIMCO; and Wellington.

Fixed-income managers: Domestic — Harris Trust and M.D. Sass.

Real estate managers: AMLI Southwest; Chemical Bank; Connecticut General; Coldwell Banker; Copley; GE Investment Realty; JMB; LaSalle; and RCB.

GIC managers: Aetna; Hancock; Metropolitan; and Travelers.

Venture capital: Abbott Capital; Amerindo; Blackstone; Carl Marks; GE Investments Hotel Partnership; Norton Partners; Olympus Private Placement Fund; Robertson Colman; T. Rowe Price; Recovery Equity Investors; and Ventures Trident.

The master trustee and the global custodian is Harris Trust; the investment consultant is Rogers, Casey.

David White, vice president-capital management and trust investment, oversees investment management of the fund.

United Airlines Inc.

	($ millions)
Total assets	4,000
Defined benefit	2,100
Total defined contribution	1,900
Thrift or savings	1,200
401(k)	700
Employer DB contributions	60
Benefit payments	85
Employer DC contributions	60
Defined benefit asset mix:	
Stocks	48%
Fixed income	43%
Cash equivalents	2%
Real estate equity	7%
Defined contribution asset mix:	
Other stock	27%
Fixed income	13%
Cash equivalents	60%

CHICAGO — As of Sept. 30, United Airlines Inc.'s total employee benefit assets increased 8.1% to $4 billion from $3.7 billion a year earlier. Defined benefit assets increased 5% during the same period, to $2.1 billion from $2 billion. Defined contribution assets increased 11.8%, to $1.9 billion from $1.7 billion.

Equity managers: Domestic — Cambiar; First Manhattan; Hotchkis and Wiley; Lincoln Capital; McCowan; Frank Russell Trust; Sit; and Weiss, Peck & Greer.

International — HD International and Hill Samuel.

Fixed-income managers: Domestic — Sanford Bernstein; W.R. Huff; J.P. Morgan; and PIMCO.

Real estate managers: LaSalle; PMRealty; and RREEF.

The master trustee and global custodian is National Bank of Detroit; the investment consultant is Frank Russell.

The key person overseeing the investment management of the fund is David J. Dykstra, director of pension assets.

The General Board of Pensions of the United Methodist Church

	($ millions)
Total assets	3,459
Defined benefit	1,729
Defined contribution	1,730
Employer DB contributions	0
Benefit payments	118
Employer DC contributions	187
Internally managed assets:	
Total DB	175
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	54%
Fixed income	23%
Cash equivalents	10%
Real estate equity	4%
Mortgages	1%
GICs/BICs	8%
Defined contribution asset mix:	
Other stock	51%
Fixed income	25%
Cash equivalents	11%
GICs/BICs	8%
Real estate	5%

EVANSTON, Ill. — As of Sept. 30, The General Board of Pensions of the United Methodist Church's total employee benefit assets decreased 3% to $3.459 billion from $3.566 billion a year earlier. Defined benefit assets increased 9.8% during the same period, to $1.729 billion from $1.575 billion. Defined contribution assets, in a 403(b) plan, decreased 13.1%, to $1.73 billion from $1.991 billion.

Equity managers: Domestic — ANB; Ariel; Batterymarch; Capital Guardian; Columbus Circle; Delaware Investment; Fidelity Management; Franklin Research; INVESCO; Nicholas-Applegate; Olympic; Provident Investment Counsel; RCM Capital; and Westwood.

International — Capital Guardian.

Fixed-income managers: Domestic — ANB; CIGNA; Criterion; Delaware; Franklin; Lincoln Capital; Mellon Bond; and STW.

Real estate managers: CIGNA and JMB.

The master custodian and global custodian is Mellon; the investment consultant is Hotchkiss Associates.

Key personnel overseeing the investment management of the fund are F. Gale Whitson-Schmidt, chief financial officer; Diane Pinney, treasurer; and Mary Pat Kincaid, director-portfolio department.

UMWA Health & Retirement Funds

	($ millions)
Total assets	4,759
Defined benefit	4,735
401(k)	24
Employer DB contributions	78
Benefit payments	443
Employer DC contributions	0
Internally managed assets:	
Total DB	675
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	41%
Fixed income	50%
Cash equivalents	6%
Real estate equity	3%
Defined contribution asset mix:	
Other stock	23%
Fixed income	8%
Cash equivalents	34%
GICs/BICs	22%
Balanced fund	13%

WASHINGTON — As of Sept. 30, the UMWA Health & Retirement Funds' total employee benefit assets decreased 10.2% to $4.759 billion from $5.3 billion a year earlier. Defined benefit assets decreased 8.9% during the same period, to $4.735 billion from $5.2 billion. Defined contribution assets increased 118.2%, to $24 million from $11 million.

Equity managers: Domestic — Argus Investors'; Barrow, Hanley, Mewhinney and Strauss; DFA; Dreman; J.W. Seligman; Lazard Freres; Loomis, Sayles; Scudder, Stevens & Clark; T. Rowe Price; Vanguard; and Wells Fargo.

Fixed-income managers: Criterion; Loomis, Sayles; J.P. Morgan; STW Fixed Income; and Scudder, Stevens & Clark.

Real estate managers: AEW; Goldman, Sachs; Metropolitan Life; RREEF; and TCW Realty.

Other managers: Calvert Group; Fidelity Investments; Prudential Asset; Putnam; and U.S. Trust.

The master trustee is Boston Safe.

The key person overseeing the investment management of the fund is Charles S. Stephens, director of investments.

United Nations Joint Staff Pension Fund

	($ millions)
Total assets	8,591
Defined benefit	8,591
Employer DB contributions	250
Benefit payments	387
Internally managed	8,591
Defined benefit asset mix:	
Stocks	37%
Fixed income	41%
Cash equivalents	10%
Real estate equity	12%

NEW YORK — As of Sept. 30, the United Nations Joint Staff Pension Fund's total assets increased 2.1% to $8.591 billion from $8.414 billion a year earlier. All assets are defined benefit and managed internally.

The trustee is the U.N. Secretary-General; the global custodian is Fiduciary Trust Co. International, which also provides global investment advice.

Key personnel overseeing the investment management of the fund are J. Richard Foran, representative of the secretary-general for investments; Henry L. Ouma, chief-investment management services; and Mauricio Rezende, investment officer-operations.

United Parcel Service of America Inc.

	($ millions)
Total assets	2,026
Defined benefit	967
Total defined contribution	1,059
Thrift or savings	902
401(k)	157
Employer DB contributions	90
Benefit payments	15
Employer DC contributions	31
Internally managed assets:	
Total DB	97
Total DC	138
Defined benefit asset mix:	
Stocks	39%
Fixed income	24%
Cash equivalents	18%
Real estate equity	1%
BICs/GICs	9%
Company assets	9%
Defined contribution asset mix:	
Company stock	11%
Other stock	14%
Fixed income	21%
Cash equivalents	22%
BICs/GICs	25%
Company assets	4%

GREENWICH, Conn. — As of Sept. 30, United Parcel Service of America Inc.'s total employee benefit assets increased 12.4% to $2.026 billion from $1.802 billion a year earlier. Defined benefit assets increased 6.5% during the same period, to $967 million from $908 million. Defined contribution assets increased 18.5% to $1.059 billion from $894 million.

Managers: Domestic — Sanford Bernstein; Connecticut National Bank; First Fidelity; Mitchell Hutchins; and J.P. Morgan.

The master trustees are Bankers Trust and State Street Bank.

Key personnel overseeing the investment management of the fund are Robert F. Markmann, investments manager, and Bruce Bissell, investments supervisor.

United Technologies Corp.

	($ millions)
Total assets	7,960
Defined benefit	5,400
Total defined contribution	2,560
Employer DB contributions	na
Benefit payments	na
Employer DC contributions	na
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	

HARTFORD, Conn. — As of Sept. 30, United Technologies Corp.'s total employee benefit assets decreased 3.6% to $7.96 billion from $8.261 billion a year earlier. Defined benefit assets decreased 10.1% during the same period, to $5.4 billion from $6.005 billion. Defined contribution assets increased 13.5% to $2.56 billion from $2.256 billion.

The master trustee and global custodian is Citibank.

Key personnel overseeing the investment management of the fund are Michael J. Vrissis, James C. Goodridge and Robert J. Cepelak, pension investment managers.

United Telecommunications

	($ millions)
Total assets	1,588
Defined benefit	1,168
401(k)	420
Employer DB contributions	0
Benefit payments	26
Employer DC contributions	na

KANSAS CITY, Mo. — As of Sept. 30, United Telecommunications Inc.'s total employee benefit assets increased 6.1% to $1.588 billion from $1.497 billion a year earlier. Defined benefit assets decreased 5.3% during the same period, to $1.168 billion from $1.233 billion. Defined contribution assets increased 59.1% to $420 million from $264 million.

Investment managers: Barnett Banks; Brinson; Dillon, Read; DFA; Equitable Real Estate; Fidelity Management; Grantham, Mayo, Van Otterloo; Jennison; Loomis, Sayles; J.P. Morgan; NCNB; Northwestern National Life; PIMCO; T. Rowe Price; PRIMCO; Provident Investment; Sit; TCW Asset; Wall Street Associates; Well Fargo Nikko; and Westport Asset.

The master trustee is Northern Trust; the investment consultant is Frank Russell.

W.N. Searcy, pension trust officer, oversees investment management of the fund.

U S WEST Inc.

	($ millions)
Defined benefit assets*	7,998
Employer DB contributions	na
Benefit payments	na
*P&I estimate	

ENGLEWOOD, Colo. — As of Sept. 30, *P&I* estimates U S WEST Inc.'s defined benefit assets decreased an estimated 1.3% to $7.998 billion from the actual $8.1 billion reported as of Sept. 30, 1989. The estimate is based on the company's annual report.

USX Corp.

	($ millions)
Total assets	8,750
Defined benefit	8,380
Profit-sharing	370
Employer DB contribution	0
Benefit payments	940
Employer DC contributions	20
Internally managed assets:	
Total DB	8,380
Total DC	370
Defined benefit asset mix:	
Stocks	52.3%
Fixed income	31.6%
Cash equivalents	12.7%
Real estate equity	2.8%
Mortgages	0.4%

Other	0.2%
Defined contribution asset mix:	
Company stock	46%
Other stock	4%
Fixed income	11%
GICs/BICs	39%

PITTSBURGH — As of Sept. 30, USX Corp.'s total employee benefit assets decreased 10.9% to $8.75 billion from $9.825 billion a year earlier. Defined benefit assets decreased 11.8% during the same period, to $8.38 billion from $9.5 billion. Defined contribution assets increased 13.8%, to $370 million from $325 million.

All assets are managed internally.

The master custodians are J.P. Morgan and U.S. Trust.

Key personnel overseeing the investment management of the fund are Gary A. Glynn, president, and Peter C. Lincoln, vice president-investments, both of United States Steel and Carnegie Pension Fund.

Utah State Retirement Fund

	($ millions)
Total assets	3,850
Defined benefit	3,850
Employer DB contributions	140
Benefit payments	55
Internally managed assets	2,250
Defined benefit asset mix:	
Stocks	44%
Fixed income	38%
Cash equivalents	5.5%
Real estate equity	8%
Mortgages	1%
Other	3.5%

SALT LAKE CITY — As of Sept. 30, the Utah State Retirement Fund's total employee benefit assets decreased 1.5% to $3.85 billion from $3.908 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Atalanta/Sosnoff; DFA; J.W. Seligman; Smoot, Miller & Cheney; Value Line; and Wellington.

International — Baring and State Street Bank.

Real estate managers: Aetna; Alex. Brown; Equitable; JMB; Metric; and Sentinel.

The master custodian is Northern Trust; the investment consultants are Callan and SEI.

The key person overseeing the investment management of the fund is W. Dan Smith, investment officer.

V

Virginia Retirement System

	($ millions)
Total assets	10,687
Defined benefit	10,687
Employer DB contributions	874
Benefit payments	390
Internally managed assets	1,002
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	50%
Fixed income	34%
Cash equivalents	8%
Real estate equity	4%
Alternative equity	4%

RICHMOND, Va. — As of Sept. 30, the Virginia Retirement System's total employee benefit assets increased 4.3% to $10.687 billion from $10.244 billion a year earlier. All are defined benefit assets.

Equity managers: Acadian; Ardsley Partners; Bankers Trust; Capital Growth; Concord; Corinthian; Davis, Weaver & Mendel; Delaware Investment; Fidelity Management; GAMCO; Geocapital; Hutson Management; IDS Advisory; Investment Research; Jacobs, Levy; Jundt/Capen; Lehman Ark; Lincoln Capital; Mellon Capital; Miller, Anderson; Negative Beta; Nicholas-Applegate; Pacific Financial; Rosenberg Institutional; Donald Smith; State Street Bank; and Tukman Capital.

Fixed-income managers: Sanford C. Bernstein; MacKay-Shields; Massachusetts Financial; Merganser; Security Capital; Sovran Capital; Western Asset.

Real estate managers: Equitable; LaSalle; J.P. Morgan; New England Mutual; Phoenix Mutual; Prudential Insurance; and Metropolitan Life.

The master custodian is Boston Safe Deposit; the investment consultants are Rogers, Casey and Pension Consulting Alliance.

Key personnel overseeing the investment management of the fund are Garry Allen, acting director of investments; Nancy Everett, assistant investment officer; and John McLaren, director of alternative investments.

W

Washington State Investment Board

	($ millions)
Total assets	12,839
Defined benefit	12,839
Employer DB contributions	na
Benefit payments	na
Internally managed assets	6,803
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	29.6%
Fixed income	26.9%
Cash equivalents	8%
Real estate equity	9.5%
Mortgages	8.6%
Oil & gas	0.9%
LBOs	8.7%
Three-way asset allocation	3.2%
Venture capital	[illegible]
Private placements	[illegible]

OLYMPIA, Wash. — As of Sept. 30, the Washington State Investment Board's total employee benefit assets increased 1.4% to $12.839 billion from $12.66 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Columbia; Hotchkis and Wiley; Lord, Abbett; Mellon Capital; Smith & Co.; United Capital; and Wells Fargo.

Real estate managers: Centennial; Copley; Equitable; Pacific Trust; PMRealty; Quadrant; RREEF; Sentinel; UNICO; and Winmar.

The master trustee is Bank of New York; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are David Weig, executive director; Greg Baarson, deputy director; and Marc Fovinci, senior investment officer.

Westinghouse Electric Co.

	($ millions)
Total assets	5,554
Defined benefit	3,519
401(k)	2,035
Employer DB contributions	100
Benefit payments	468
Employer DC contributions	61
Internally managed assets:	
Total DB	1,349
Hedging devices used:	
Stock index futures	
Short selling	
Defined benefit asset mix:	
Stocks	56%
Fixed income	24%
Cash equivalents	2%
Real estate equity	14%
Mortgages	4%
Defined contribution asset mix:	
Company stock	12%
Other stock	2%
GICs/BICs	86%

PITTSBURGH — As of Sept. 30, Westinghouse Electric Co.'s total employee benefit assets decreased 4.7% to $5.554 billion from $5.828 billion a year earlier. Defined benefit assets decreased 12.2% during the same period, to $3.519 billion from $4.007 billion. Defined contribution assets increased 11.8% to $2.035 billion from $1.821 billion.

The master trustee and global custodian is Mellon Bank; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Thomas G. Scannell, director-pension investments; and Joanne Welsh, manager-pension investments.

State of Wisconsin Investment Board

	($ millions)
Total assets	18,482
Defined benefit	18,482
Employer DB contributions	387
Benefit payments	564
Internally managed assets	17,790
Hedging devices used:	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	44%
Fixed income	45%
Cash equivalents	7%
Real estate equity	3%
Mortgages	1%

MADISON, Wis. — As of Sept. 30, the State of Wisconsin Investment Board's total employee benefit assets decreased 7.7% to $18.482 billion from $20.033 billion a year earlier. All are defined benefit assets.

Equity managers: International — Capital Guardian; GE Investment; Mercator; and Morgan Stanley.

Fixed-income managers: International — Alliance Capital; Brinson Partners; Deutsche Bank; Morgan Grenfell; and Nomura.

The master custodian is Morgan Guaranty and the global custodian is Northern Trust.

Key personnel overseeing the investment management of the fund are Patricia Lipton, executive director, and James Severance, investment director.

The International Bank for Reconstruction and Development (World Bank)

	($ millions)
Total assets	3,171
Defined benefit	3,171
Employer DB contributions	50
Benefit payments	54
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	47%
Fixed income	32%
Cash equivalents	12%
Real estate equity	6%
Other	3%

WASHINGTON — As of Sept. 30, total employee assets of the International Bank for Reconstruction and Development (World Bank) decreased 3.7% to $3.171 billion from $3.292 billion a year earlier. All assets are defined benefit.

The master trustee is State Street Bank; the global custodian is Northern Trust; the investment consultant is Strategic Investment Partners.

Key personnel overseeing the investment management of the fund are Nestor V. Santiago, pension plan administrator; Kelda J. Caldwell, pension investment unit chief; and Anthony Albert, pension investment control officer.

X

Xerox Corp.

	($ millions)
Total assets	3,333
Defined benefit	2,287
Profit-sharing	1,046
Employer DB contributions	0
Benefit payments	na
Employer DC contributions	129
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	60.2%
Fixed income	11.3%
Cash equivalents	15.5%
Real estate equity	10.4%
Other	2.6%
Defined contribution asset mix:	
Other stock	14.4%
GICs/BICs	77.4%
Fixed income	2.1%
Cash equivalents	3.2%
Other	2.9%

STAMFORD, Conn. — As of Sept. 30, Xerox Corp.'s total employee benefit assets decreased 2.1% to $3.333 billion from $3.405 billion a year earlier.

As a result of Xerox's conversion to a cash balance plan, its defined benefit and defined contribution assets changed significantly — with defined benefit assets jumping to $2.287 billion, compared with $214 million the previous year, and defined contribution assets falling to $1.046 billion from $3.191 billion.

The master trustee and global custodian is State Street Bank; the investment consultants are Collins Associates and Frank Russell.

Key personnel overseeing the investment management of the fund are Robert R. Evans, assistant treasurer; Gerald J. Paolini, manager-trust investment strategy; Mary L. Cahill, manager-trust investments; and Toni S. Hanna, trust investment analyst.

Firm offers new global bond fund

BOSTON — Boston Safe Deposit and Trust Co. has launched the Global Short Term Fund, a pooled fixed-income fund.

The fund will invest in high-grade government and corporate securities, with a maturity of one year or less, from the world's major fixed-income markets. PanAgora Asset Management, which is partly owned by Boston Safe, will be the fund's investment adviser. The fund's objective is to return three percentage points more than U.S. Treasury Bills on an annual basis.

PanAgora officials have set a goal of 20 clients and $500 million in assets for the fund's first year. The Shearson Short-Term World Income Fund, a mutual fund with the same investment strategy also managed by PanAgora, was introduced to retail investors last August; by year end, it had more than $450 million in assets. ■

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Alternatives

Continued from page 17
volved."

While interest in some alternative investments is stagnant, Mr. Feldman said there could be interest in some form of "conservative alternatives."

"One trend we will see is a resurgence of more conservative alternatives, such as option programs and portfolio insurance in some form," he said.

Doug Pategunas, principal at Ennis Knupp & Associates, Chicago, said the totals for the top 10 funds invested in venture capital and leveraged buy-outs "don't surprise me."

"Plan sponsors are pulling in their horns a little. Venture capital returns were off in the late 1980s, causing people to rethink their strategies. They are a little hesitant to invest in these areas, whether it will continue I don't know," said Mr. Pategunas.

He added, however, the venture capital area remains a viable investment alternative for larger plan sponsors.

GTE Corp., Stamford, Conn., increased its LBO investment by about $38 million to $181 million in 1990, while cutting its venture capital investment by $22 million, to $178 million.

John Carroll, president of GTE Investment Management Corp., said the venture capital total is somewhat misleading because a $100 million commitment was made late in 1990. He said GTE is committed to venture capital as an investment alternative over the long term even though "returns have struggled."

"We're upping our commitment because of its future prospects and because the asset class has been on its back for so long. It's an asset class you can't ignore. You have to believe there are some opportunities there."

Mr. Carroll said GTE views leveraged buy-outs in a different light, however. "LBOs topped out a couple of years ago and we have only modestly kept pace," he said. "We are committing less than is being returned to us" from existing deals.

He said GTE has invested in LBO funds with Forstmann Little & Co., New York, "because we know the deals and we know the type of deals they will do. . . . It is easy to make a case for exceptional opportunities for LBO funds that are not based on junk bonds."

Oil and gas investments, as might be expected, were down in 1990, and the outlook is confounding because of the uncertainty over oil prices because of the tensions in the Middle East.

The total investment in direct oil and gas deals by the 10 largest investors rose to $823 million in 1990 from $774 million in 1989.

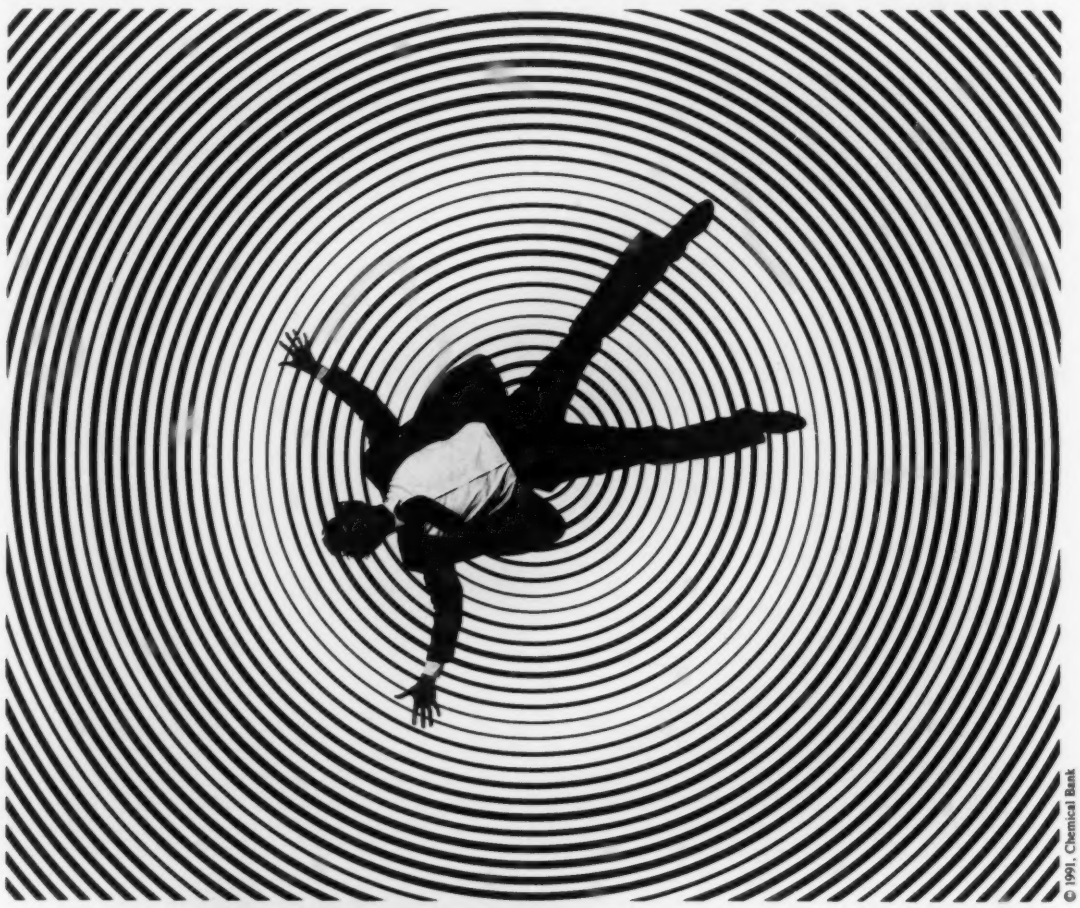
Peter Keller, principal with the oil and gas investment firm of RPI Institutional Services Inc., New York, said direct investments in oil-related programs have all but halted since the Iraqi invasion of Kuwait in August.

"What we saw last year was some expansion of interest in oil and gas, but then it hit a brick wall in August. Any deals with an oil component, you can't sell the properties until there is some certainty on oil prices. It's a tough market until there is some resolution of what's going on in the Middle East," said Mr. Keller.

GTE saw its oil and gas portfolio increase to $107 million from $85 million last year. Mr. Carroll said aside from events in the Middle East, oil and gas is a good investment based on fundamentals and supply and demand factors over the long term.

He said GTE continues to invest in oil and gas "on an opportunistic basis."

The Minnesota State Board of Investment, St. Paul, oil and gas portfolio dropped $7 million to $89 million. A spokesman for the system said one deal was liquidated, but the Minnesota system remains committed to oil and gas and plans to make additional investments. ■



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Foreign

Continued from page 17
national bonds rose 144% to $419 million, or 126% when market adjusted.

In the year ended in September, the Salomon Brothers World Government Bond Index rose 7.54%.

In the defined benefit area, the data revealed 14 new international investors. Among these were the Public Employees Retirement System of Mississippi and GenCorp Inc.

GenCorp's $1.3 billion plan Fairlawn, Ohio, last June hired managers for international equities and fixed income. As of September, the fund's foreign equities investments totaled $100 million, including $80 million in an EAFE-minus-Japan account managed by Bankers Trust Investment Management, London, and $20 million in a Japan-only account managed by J.P. Morgan Investment Management Inc., New York. The fund also selected Bankers Trust to manage its $107 million of international bonds, said Sina Baldwin, GenCorp's manager-investment analysis.

The increasingly thunderous march abroad by large public funds has been shaking the investment scene. By September, for instance, the California employees fund, which only inaugurated foreign investing in 1989, had catapulted to rank as the largest international pension fund investor.

In September, the California fund had $5.7 billion in international investments, of which $3.7 billion was equities and $2 billion was bonds. The next highest was the United Nations Joint Staff Pension Fund, New York, with almost $4.6 billion of international investments. The Teachers Insurance and Annuity Association — College Retirement Equities Fund ranked third overall and first among defined contribution plans with $4.2 billion.

In early January, DeWitt Bowman, chief investment officer of the California fund, said the international bond investing target of 4% of assets had been reached. But the fund still was pouring money into overseas equities to reach its 12% equities target. He said the system was funding foreign equities at a rate of "several hundred million dollars per month. It will probably (take) funding foreign equities through June to reach our target." ■

Pensions & Investments will take a look at the largest non-U.S. money managers Sept. 30.

PBGC

Continued from page 18

while stocks are being halved to 25% and real estate will be phased out.

As of Sept. 30, stocks had fallen to 33% of assets, while bonds were at 59%, and cash and real estate remained steady at 5% and 3%, respectively.

The structure of the PBGC's four funds is driving the agency into the unique investment approach. The agency has two "revolving funds," totaling $1.4 billion, which are required to be invested in Treasury securities only, although the agency hopes to get permission to invest in zero-coupon issues as well.

Of the $1.3 billion in the PBGC's two trust funds, composed of pension assets the agency has taken over, $600 million will be invested in bonds, but there are no restrictions on types of instruments that can be purchased.

But the desire to get the 15-year-plus duration for the overall bond portfolio means the smaller trust fund assets will have to be used to overlay the revolving fund assets. Managers could leverage the trust fund portfolio with financial futures.

The agency might hire one or two bond managers. If two bond managers are picked — which would diversify risk — each would have responsibility for half of the revolving fund and trust fund assets.

To be eligible for the contract, the PBGC is requiring managers to have experience in running a structured fixed-income portfolio with a duration of at least 10 years. This requirement raised questions among some of the managers attending the contract conference.

For example, John Maschoff, vice president of Washington Square Advisers, Chicago, asked whether a 25-year duration bond portfolio the firm runs for Ford Motor Co. would count, even though the portfolio is part of a larger portfolio with a much shorter duration.

Agency officials gave a discouraging response. "I think we need to limit the market to those who have operated in this field, to the extent that we can — recognizing it's a fairly limited number," Mr. Evans said.

Managers who have bid are believed to include NISA, Milwaukee; Goldman, Sachs Asset Management, New York; Lincoln Capital Management Co., Chicago; Brinson Partners Inc., Chicago; and J.P. Morgan Investment Management Inc., New York. In addition, the PBGC's existing bond managers — Pacific Investment Management Co., Newport Beach, Calif., and Morgan Stanley Asset Management, New York — are believed to be in contention for the contracts.

Measuring performance for the bond portfolio will be complex. The PBGC, an innovator in normalized benchmarks, might use a benchmark of two Treasury securities that would provide the duration compatible with the agency's liability stream, Stephen Nesbitt, a consultant with Wilshire Associates Inc., Santa Monica, Calif., told the bond managers.

After the bond hires are made, agency officials will turn to the stock. Half of the agency's equity allocation will remain in passive vehicles. State Street Bank & Trust Co., Boston, now runs a Standard & Poor's 500 Stock Index account, as well as serves as the agency's custodian bank. American National Bank & Trust Co., Chicago, runs an extended-market account for the PBGC.

That still leaves about $300 million in stocks, which the agency plans to dole out in $100 million chunks. As of Sept. 30, the PBGC's active equity managers were Chase Investors Management Corp., New York; Lazard Freres Asset Management, New York; Lehman-Ark Management Co., New York; and United Capital Management, Denver.

McCowan Associates Inc., New York, was dropped recently, as were the agency's three farm-team equity managers: Disciplined Investment Advisors Inc., Evanston, Ill.; Loomis, Sayles & Co. Inc., Pasadena, Calif.; and Nelson, Benson & Zellmer Inc., Denver.

In addition, the agency's real estate managers are JMB Institutional Realty Corp., Chicago; The RREEF Funds, San Francisco; and TCW Realty Advisors, Los Angeles.

Separately, on Oct. 5 the agency took over $1.4 billion in Eastern Air Lines pension assets, which is being managed separately in the PBGC/Eastern Air Lines Settlement Trust. ■

Managers

Continued from page 18

sistent discipline, something they can identify with and understand and they look for managers who stick by their guns."

While opinions differ on whether the trend toward indexing has peaked, index managers were well represented among both domestic equity and fixed-income managers.

Patricia Dunn, chief investment officer at Wells Fargo Nikko, said the firm's good showing "reflects increasing and sustained use of structured investment strategies by U.S. institutional investors."

"It reflects the fact that index funds have performed reliably and have become a standard element in the way plans are managed," she said.

Wyatt's Mr. Schneider said that while indexing "in terms of new business hasn't see a slowdown yet," he believes such a slowdown is coming.

"I'd expect to see some trending downward or tapering off. From a style standpoint, we may see indexing not performing as well now as it has historically."

Index managers also were well represented among the top domestic bond managers, where Pacific Investment Management Co., Newport Beach, Calif., finished on top with 25 mentions, followed closely by J.P. Morgan with 24.

Lincoln Capital Management Co., Chicago, took the largest jump among bond managers from the past year's survey rising to a tie for fourth from eighth place.

Parker Hall III, Lincoln's president and chief investment officer, said Lincoln "has made unusual forward strides in enhanced bond index funds" during the past two years "through the merger of high technology multifactor models. This is an area of major interest and thrust at Lincoln."

Paul McCann, chief investment officer at Mellon Bond Associates, which tied for third place in domestic bonds, said Mellon's growth has been reflected in all areas — active, immunized and indexed bonds as well as in the short-term area.

"We have been steadily bringing in new business in the last couple of years and . . . our major growth in that period has been in bond indexing and short term," he said.

Mr. McCann said the growth in bond indexing "absolutely" has not peaked and "still has a ways to go."

Among international and global managers, Capital Guardian Trust Co., Los Angeles, switched places with State Street Bank & Trust Co., Boston, to move into first with 17 mentions. State Street tied for second with Baring International Investment Ltd., London, at 15 mentions.

John Seiter, senior vice president at Capital Guardian, said the firm's standing "probably reflects the fact that Capital Guardian has been actively involved in international markets on a variety of levels since the mid-1950s."

Mr. Seiter said Capital Guardian has a global presence with offices in nine cities around the world and bases its investments on global research. "All these things are the result of a very large global research effort. We are a true bottom-up stock picker by nature," he said.

Among realty managers, Equitable Real Estate Investment Management Inc., Atlanta, moved up two places to rank first, with 31 mentions, followed by JMB Institutional Realty Corp., Chicago, with 29.

George Puskar, chief investment officer, said Equitable's prominent listing among large plan sponsors "reflects well on our diversified product mix from the real estate standpoint in terms of our large open-end fund (and) a diversified set of closed-end vehicles that meet most objectives in terms of real estate and investment strategies."

Mr. Puskar said real estate investments have been tarnished by the visibility of problems associated with the savings and loan and banking industry and "the connection is not there" in terms of institutional commercial real estate investments.

"It (real estate) got too popular too soon . . . but I do think U.S. pension funds have generally fared better than other groups such as S&Ls and banks. We tell people they shouldn't lose sight of the fact that real estate is a very large and important segment of the U.S. economy." ■

Less stock means more for nation's DC plans

By Curtis Vosti

Defined contribution plans, with generally lower allocations to equities and higher allocations to fixed investments, outpaced the growth of defined benefit plans.

Led by additions to or implementations of employee stock ownership plans and companies with large percentages of plan assets in their own stock, defined contribution plans among the Top 1,000 employee benefit plans grew 2.8% for the year ended Sept. 30, while defined benefit plan assets dropped 3% in the same period.

Firms such as ITT Corp., Phillips Petroleum Co., Mobil Oil Corp. and PPG Industries Inc. all reported defined contribution asset growth from ESOPs.

Among 11 companies for which company stock made up more than 50% of assets in their largest defined contribution plan, some — like Abbott Laboratories, Pacific Gas & Electric Co. and Atlantic Richfield Co. — reported their stock value grow appreciably in the 12 months. The 11 increased their defined contribution assets an aggregate 18.2% from a year earlier, despite a 3.7% drop in Caterpillar Inc.'s $602 million in defined contribution assets. Its largest defined contribution plan is all in company stock.

Less $387 million in contributions, the 11 plans still grew an aggregate 15%, far above the rate for defined contribution growth among all plans in the Top 1,000.

For the Top 1,000 plans, those with defined contribution assets grew an aggregate 4.8%, to $392 billion, while defined benefit assets among the Top 1,000 declined 0.9%, to $1.467 trillion.

Defined contribution plans of the companies in the Top 1,000 had 39.8% in stocks (their own and others), while defined benefit plans in the same group had 43.6%. (Companies with more than one defined contribution plan were asked for the asset mix of the largest fund only.)

The defined contribution plans had 45.3% in fixed income and guaranteed investments; defined benefit plans had 39.8%.

For the year ended Sept. 30, the Standard & Poor's 500 Stock Index returned 9.35%; the Shearson Lehman Government/Corporate Bond Index gained 6.75%.

In 1990, $9.1 billion was contributed to defined contribution plans among the top 200 employee benefit plans, compared with $9.2 billion a year earlier. Defined benefit contributions in the same period rose to $44 billion from $41.1 billion. ■

Funds own 1% of junk bonds

By Marlene Givant Star

Twenty-one of the biggest pension funds in the country invest $2.7 billion in junk bonds, accounting for 1% of the troubled market.

But that number is understated because some funds do not have a figure on junk holdings while others just declined to provide their junk totals.

Still, the *Pensions & Investments* list is the first published grouping of pension funds holding non-investment-grade bonds, revealing a figure that has eluded even the Commerce Department, which compiles figures on the flow of funds to virtually all asset classes.

The high-yield market had its worst performance ever in 1990 returning −4.24%, according to the Merrill Lynch High Yield Securities Composite Index, as junk bond kingpin Drexel Burnham Lambert filed for bankruptcy protection, and leveraged buyouts and other junk-financed companies cratered under the burden of high interest payments.

The survey seems to show pension funds invest less in junk than many people think, even though the figures are understated. For instance General Motors Corp., a known junk investor, did not disclose its holdings.

P&I's 1% figure is in sharp contrast with Salomon Brothers Inc.'s June 30 estimate that U.S. pension funds represent 14% of the public junk market.

Joseph Bencivenga, director and manager of high-yield research at Salomon Brothers, said Salomon estimates total pension fund holdings in junk bonds at about $20 billion. Included in the figure are unrated securities — many private placements — that should be considered high yield; a recent spate of investment-grade securities downgraded to speculative; and investment-grade bonds trading at very high yields.

"These are all wild guesses," Mr. Bencivenga said, "The figure is very subjective, based on available information plus conjecture."

Corporate pension funds dominate the list of junk investors. J.C. Penney is the biggest junk bond investor on the list with $535 million, followed by Textron Inc. with $362 million, Allied-Signal Inc. with $280 million and Pacific Telesis Group with $250 million.

Allied-Signal, Morristown, N.J., an investor in junk bonds since 1984, is sitting tight for 1991. "We're comfortable where we are. There continues to be some values to be found, but we don't believe this is a time to be increasing exposure" given the current recession, said Jay Burden, manager of fixed-income investments.

He added, "on a relative basis we're definitely pleased with our managers' performance." While some holdings are undergoing restructurings, those situations represent "a very small percentage of the portfolio," Mr. Burden said.

The $9 billion PacTel defined benefit fund, San Francisco, boosted its commitment to junk at the end of 1989 (*P&I*, April 16).

Among public funds, the biggest investor is the Illinois State Board of Investment, but Larry G. Darlington, bond manager, declined to comment on the investments, less than half of which are managed internally.

Under the State of Connecticut Trust Funds' guidelines, 90% of bonds must be investment grade or better, according to Terry Helming, investment officer-fixed income. The fund, with $150 million in junk bonds as of Sept. 30, has one outside manager specializing in emerging credits that may hold junk bonds. The in-house portfolio, representing 40% of the fund's $2 billion in domestic marketable fixed income, also must be investment grade.

Mideast

Continued from page 1

reported Richard Garland, vice president. The markets' initial euphoria over the war news "is hype," he said Jan. 17. He anticipated markets would soon "come back to (economic) reality."

Robert Whitmore, managing director of WorldInvest Ltd., London, said Jan. 17 his firm had not reacted to the markets' run-ups. "It would not be our style" to react to volatile markets, he said. "In this environment it's appropriate to look through the Middle East crisis . . . to fundamental influences."

At General Electric Investment Corp., Gene Bolton, senior vice president-equity portfolios, and Art Bahr, executive vice president-equities, said they and their staffs would put even more time into thinking of better ways to assess the complex risks associated with international investing. They cited the two-thirds of GEIC's portfolio invested in global companies as well as the portfolio's other international holdings.

That doesn't mean GEIC, which manages more than $23 billion for General Electric Co. and other institutional investors, will reduce its commitment to expanding international investments.

Oregon State Treasurer Tony Meeker, who oversees the $9.9 billion Oregon Public Employes' Retirement System, another big international investor, said there's "a big temptation to withdraw" from international investing. But he said that would be a mistake. Oregon will continue to expand its international holdings — $1.1 billion in equities — to capture the growth and value opportunities he sees outside the United States.

Emerging markets investing, a relatively new twist in the international arena, might be hurt by the turn of world events.

"I think people will look twice at emerging markets — or at least they should," said Thomas W. Smith, political economist at Yamaichi Research Institute, New York. "There may be military risks or political risks not readily apparent to the average business person or microeconomist." After all, he said, "Saddam Hussein managed to surprise everyone with his attack" on Kuwait.

The more than $8 billion Tennessee Consolidated Retirement System isn't an emerging markets investor, but it did factor Iraq's invasion of Kuwait into its strategy for its $700 million invested internationally. While a global recession remains the more important influence on stock and bond prices, Iraq's action "was a catalyst" for this. "It probably made the recession in the U.S. and the U.K. worse than otherwise because people cancelled big capital spending or investing decisions," said Roy Wellington, Tennessee's international portfolio manager.

While focused on economic issues, Tennessee did find opportunity this past year to refine its investing because of the Middle East tension. "I did buy a few oil stocks and shorten the bond portfolio — moves you could attribute to Iraq," Mr. Wellington said.

Immediate reactions among U.S. investors to the Persian Gulf situation involved adjusting portfolios, either to take advantage of investment opportunities or to wait out developments by raising cash holdings. Investors cited a range of crisis-related strategies, including buying U.S. oil and defense industry stocks and using complex hedging techniques.

Although many institutional investors said they came into the gulf crisis with relatively high cash positions after pulling back from the volatile stock markets, several short-term money managers report seeing a flight to cash. Some managers said they have picked up new accounts in recent weeks as the threat of a Mideast war and troubles in the Soviet Union grew.

Dave Raulston, principal with Trinity Capital Advisors, Charlotte, N.C., said he is seeing "a great amount of cash coming out of the equity and bond markets to the short-term markets."

Mr. Raulston said a short war in the Mideast "would not be too damaging to the market. War is actually good for the short-term markets since it causes people to focus their attention on quality and liquidity."

Alan Seidner, president and chief investment officer of the Alan G. Seidner Co., Pasadena, Calif., said "the long and the short of it is that there is definitely a flight to quality. We see clients edgy about holding issues of companies which might be affected by recession."

Jeff Schoenfeld, manager-liquidity funds investment group at Brown Brothers Harriman & Co., New York, said "absolutely" the flight to quality is under way, largely because of the conflict and the effect on financial markets.

SEI Capital Resources Co., a Wayne, Pa., investment research and consulting firm, is advising investors not to reduce equity exposure based on the hostilities in the Persian Gulf. Equities have been superior performers through all prior conflicts this century. To avoid them now is a market timing decision, which, studies have shown, has a 70% chance of being incorrect, SEI said in a report to clients.

Recognizing that the characteristics of prior conflicts differ sharply from one another and from Operation Desert Storm, SEI said its analysis indicates no compelling reason to alter asset allocation strategies at this time. A synthesis of the data for World Wars I and II, the Korean War, and the Vietnam War found that even though real returns for stocks, bonds, and Treasury bills were significantly below long-term averages, common stock real returns exceeded real bond returns by 5.4% a year.

The firm noted there were many other economic and political forces affecting the capital markets during these conflicts and found markets tended to respond to the anticipated economic impact of a war rather than directly to the war itself.

In line with their long-term investment philosophy, most pension funds, money managers and other institutional investors interviewed by *Pensions & Investments* were not making significant changes in asset allocation or investment strategy.

DeWitt Bowman, chief investment officer of the $54 billion California Public Employees' Retirement System, said the Persian Gulf situation hasn't affected the pension fund's investment or allocation strategy because its long-term perspective guides such decisions.

John Carroll, president of GTE Investment Management Corp., Stamford, Conn., said the gulf war presents a classic dilemma for institutional investors ruled by a long-term perspective. "One of the real problems with a situation like this is when you know this will have a short-term but compelling impact on the market and you have a longer-term investment focus. It doesn't make sense for a pension fund to react quickly and shift assets," he said. ■

Reporter Fred Williams contributed to this story.

Top 200

Continued from page 1

dropped 1% to $1.416 trillion from $1.431 trillion. Top 200 defined benefit assets fell 3% to $1.124 trillion from $1.16 trillion; defined contribution assets rose 2.8% to $272.6 billion from $265.3 billion. Again, defined benefit plans had a higher equity exposure — 43.4% — than defined contribution plans, with 38.7%.

Equity market losses were offset somewhat by gains from other asset classes. The Shearson Lehman Brothers Government/Corporate Bond Index was up 6.8% for the year, while 90-day Treasury Bills returned 8.4%. Rates on five-year guaranteed investment contracts hovered around 9%.

Sponsors are reaping the benefits of diversification, said Ronald D. Peyton, president of Callan Associates Inc., San Francisco. "It really underscores that the best defense is diversification — and it's a pretty good offense too."

Foreign investment continued to be the diversification of choice among the largest 200 plan sponsors. International equities in defined benefit plans grew 6.1% to $34.7 billion from $32.7 billion, despite the 27.4% EAFE drop; adjusted for the market, international equity growth was 46%. International bonds grew 65.6%, to $10.1 billion from $6.1 billion (*see story on page 17*).

Defined contribution plans have been slower to go into international, but their allocations have increased. Among the Top 200 sponsors, defined contribution assets invested in international equities decreased 1.9%, to $5 billion from $5.1 billion; with market adjustment, however, that comes out to a 38.8% increase. The allocation to international bonds doubled to $400 million.

Don Brackey, principal of William M. Mercer Asset Planning Inc., Chicago, noted the attraction of foreign investing is not only diversification, but also because foreign markets are becoming an increasingly large percentage of the investible equity universe.

Mr. Peyton predicted pension asset growth will resume; he looks for the equity markets to come back and to keep pension funds' long-term returns running two to four percentage points a year ahead of inflation.

Mr. Brackey declined to make projections for the stock market in general, but said the gap between returns on small-capitalization and large-capitalization stocks might narrow.

Both consultants said the recent market slump might put upward pressure on contribution rates, although actuarial valuation methods usually work against great changes in contributions.

In 1990, $44 billion in benefits were paid by the Top 200 defined benefit plans, while contributions were $31.1 billion. This is the third consecutive year benefits have outstripped contributions; in 1989, the benefit figure was $41.1 billion, while contributions were $30.7 billion.

Other findings show the Top 200 defined benefit plans' had $137.4 billion in stock index funds, a drop of 11.5% — a figure that falls between returns for the S&P 500 and Wilshire 5000. Bond index funds grew 19.7% to $66.3 billion, well ahead of market growth.

Real estate equity assets among these plans grew 14.6% to $50.1 billion despite a so-so year for real estate, with average returns between 5% and 6%. Mortgages swelled 43.1% to $23.9 billion. Dedicated and immunized bond portfolios, a popular investment a few years ago, dropped 22% to $26.6 billion.

Among defined contribution plans in the Top 200, the percentage of assets in GICs and BICs was 34.7%, up from 31.6% the previous year and outstripping the 22.6% allocation to company stock and the 16.1% in other stock. These allocations are based on the sponsors' largest defined contribution plans. ■

Funds

Continued from page 3

1993, Mr. Lyford said.

The retirement system's board of trustees is considering a court challenge and the Legislature is unlikely to endorse the governor's plan. State lawmakers repeatedly have rejected proposals involving deferrals of pension fund contributions to balance the budget.

In addition, Gov. McKernan is proposing to delay the retirement age to 62 instead of 60 and to increase employee contributions.

Steve Crouse, director of government relations for the Maine Teachers Association, said that within the next couple of weeks a new budget plan will be designed that doesn't include borrowing from the pension fund. If that plan is approved, the governor's order would be repealed.

The teachers' pension plan, part of the state system, is significantly underfunded, Mr. Crouse said. The teachers' portion of the assets amounts to $667 million; accrued liabilities are $1.5 billion, he said. With the contribution deferral, the system's actuary, Milliman & Robertson, estimates the funded ratio will drop to 39.4% from 44%.

In Virginia, the question is whether state lawmakers will agree to give up rights to the RF&P stock. There is a historical relationship between the state and RF&P, a Richmond company that owns the Richmond, Fredericksburg and Potomac Railroad Co. The pension fund owns more than 20% of RF&P.

Current law allows the state system to transfer back to the state the shares of RF&P at book value and the state to return them to the system at the new market price. Three such transfers have taken place, resulting in an $89 million gain for the state.

Under the new proposal, the transfer mechanism would be eliminated, according to Mark Finn, chairman of the fund's investment committee and a member of the board of trustees. The Legislature will be asked to cede title of the shares to the pension fund.

In exchange, the state will be compensated based on a formula that recognizes a spread between the current stock price of $28 per share and $34.50 per share, which is what the system paid for some large blocks of stock it has purchased on the open market during the past year.

Based on that formula the state would get about $22 million. It's too early to tell how state lawmakers will react. The governor supports the plan.

In New York, Gov. Mario Cuomo's State of the State address Jan. 9 briefly touched on plans first proposed in autumn to raise $500 million from institutions to provide private debt and equity capital to small- and mid-size New York companies.

"It will not be a subsidy; investment returns will be market returns," said Lee Smith, executive director of the New York Industrial Cooperation Council, a government advisory group. He hopes the fund will be up and running by summer.

New York City Mayor Dinkins wants to raise the return assumption for the New York City pension fund to 9% from 8.25% to help pay for a 5% raise for city workers. ■

Reporter Trudy Ring contributed to this story.

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AT DEADLINE

Small managers tapped

In an effort to hire smaller money management firms, the $17.9 billion New York City Employees' Retirement System has hired 11 firms, nine of them women- or minority-owned, to run $225 million.

Hired to manage $25 million each, were Amerindo Investment Advisors, Montgomery Asset Management, NCM Capital Management, Executive Investment Advisors and Taplin, Canida and Habacht. Clemente Capital was allocated $50 million.

Progress Investment Management was given $50 million to run in a manager-of-managers program that will include at least five women- and minority-owned firms.

Callan hires consultant

Lou Ann Dolan has been named vice president and senior consultant of Callan Associates Inc. She will work in New York.

Ms. Dolan formerly was a principal and manager in the regional asset planning practice of William M. Mercer.

Brian C. Thompson has been hired at Mercer as a principal in the Dallas office. He joins from Buck Pension Fund Services.

Year-end results tallied

The median return in the PIPER universe of bank and insurance company pooled equity funds was −2.4% in 1990. The median equity fund in the PIPER+ universe of investment counseling firms, and the S&P 500, each returned −3.1%.

Swap contracts get OK

The Chicago Board of Trade has received Commodity Futures Trading Commission approval to list three- and five-year interest rate swaps contracts. Trading is likely to start this spring.

INSIDE

Illustration by Greg Loudon

Feeling the pinch

Smaller investment management firms are being squeezed out of the defined contribution market as plan sponsors are less willing to take a risk with those assets. Commentary, Page 14.

AT&T, some of whose employees are shown above, is pursuing direct private placement deals.

Private deals lure more pension funds

By Marcia Parker and Marlene Givant Star

The pension funds of AT&T, IBM, New York City and Colorado, and other institutional investors such as Chrysler Capital Investment Services Inc. are exploring an array of vehicles for making private investments.

Among seasoned players, American Telephone & Telegraph Co. is pioneering direct investments on its own behalf while IBM Corp. is among the few funds taking advantage of co-investment opportunities it is presented as a limited partner.

Other institutions, such as the Colorado Public Employees Retirement Association, Denver, and Chrysler Capital, Stamford, Conn., are significantly boosting or making first forays into partnership funds with new focuses like ailing companies and international placements. And the New York City Retirement System has hired a former investment banker to explore possible private placement investments.

Private market investors also are stepping up purchases of Rule 144A securities, the private securities sold by U.S. and foreign companies under recently eased Securities and Exchange Commission regulations.

New vehicles also are on the drawing board. Securitization of private placement portfolios may provide the investment-grade stamp many institutional investors require.

Looking to leverage their expertise in private placements, several insurance companies are aggressively soliciting pension funds as investment management clients.

The heightened investor appetite couldn't have come at a better time. No fewer than 40% of large companies expect to sell debt via private placements during the next 12 months, according to a study by Greenwich Associates, Greenwich, Conn.

The large, capital-rich institutions are attracted to private placements because they have an acute need for unexploited, potentially lucrative investments. Returns from traditional asset classes have been less than stellar and the pressure to bolster performance is keen.

Representatives of several institutions exchanged views at a recent private placements conference sponsored by Equitable Capital Management Corp. and International Business Forum.

Executives at AT&T Investment Management Organization, Berkeley Heights, N.J., one of the earliest and biggest private placement investors, believe the organization now has the expertise to stop pumping money into limited partnership funds and to begin making direct investments in companies on its own. Besides, AT&T is tired of the sizable fees all limited partners must pay. AT&T has about $1.5 billion of its $38.9 billion pension fund invested in private placements, including leveraged buy-outs.

In the next five years, Russell Steenberg, investment director with ATT Investment Management, looks for the relationship between limited partners and general partners to become more of a consulting one. Direct investing by pension funds will increase through the co-investment opportunities these partnerships offer. He also expects pension funds to finance more companies directly and acquire more equity in exchange.

In a process he nicknamed "double dipping," Marc Sacks, financial program administrator of

See **Private** *on page 31*

State Street tops in new business

Scoreboard finds indexing nets gains

By Hillary Durgin

The pension industry's money management titans again dominated the new business scoreboard in 1990 as pension funds continued to steer assets to passive products, particularly enhanced and international index products.

State Street Bank & Trust Co., Boston, and Bankers Trust Co., New York, pulled in the most new assets overall with $8.9 billion and $6.1 billion respectively. Just more than one-third — $3.1 billion — of State Street's new business was indexed. At Bankers Trust, $2.2 billion or 36% of its new assets were directed into index funds.

Overall, multiproduct managers dominated the list of top 10 business gainers in *Pensions & Investments*' Scoreboard Survey. The top 10 added $30.1 billion in new, tax-exempt institutional assets to their coffers during the year ended Nov. 30, of which 35%, or $10.5 billion, was indexed.

Other index magnates making the top 10 list among managers with more than $10 billion under management included: Pacific Investment Management Co., Newport Beach, Calif., with $2.5 billion in new business; ANB Investment Management Co., Chicago, with $2.1 billion; and Wells Fargo Nikko Investment Advisors, San Francisco, with $1.8 billion.

Index managers and consultants said the glint of international, improved returns and continued focus on pension liabilities were prompting pension executives to allocate new assets to international or enhanced index strategies, particularly in the fixed-income arena.

"We see the index market really moving away from S&P strategies toward enhanced strategies and other benchmark strategies," said H. Kent Atkins, chief investment officer at Bankers Trust. Customized strategies are used for more than half of the indexed assets managed by Bankers Trust, Mr.

See **Gains** *on page 30*

NYC teachers index $1.5 billion in stock

By Margaret Price

NEW YORK — The $10 billion New York City Teachers' Retirement System invested $1.5 billion during December in a core equity index fund run by Bankers Trust Co.

The move was the first step in the diversification of the fund after trustees voted to end its 100% bond commitment and to place 50% of assets in U.S. stocks.

The fund had been one of the last of the pension giants to diversify, and, despite continuing controversy over the move, began investing in equities immediately following the trustees' approval.

Plans are proceeding for additional stock investments and for hiring active equities managers. The fund expects to invest in stocks each quarter through 1991 and 1992, reaching its 50% target by late 1992.

Assets are being transferred to an index fund similar to one used by the city's Fire, Police and Employees' funds: it is based on a South Africa-free Russell 3000 Index.

Final active/passive targets have not been made, nor have the fund's trustees approved plans for manager searches. But Beverly L. Hamilton, who had been deputy comptroller for asset management until Feb. 1, anticipates a "year-long process" of manager searches will begin this spring.

(Ms. Hamilton has become president of Arco Investment Management, Los Angeles, which runs the employee benefit assets of Atlantic Richfield Co.)

In an unrelated move, the $17.9 billion City Employees Retire-

See **Teachers** *on page 31*

Photo by Alice Gank

New York's Elizabeth Holtzman said the teachers' fund was an underperforming asset.

NEWS DIGEST

The settlement between RJR Nabisco, the consumer tobacco and food products manufacturer, and Metropolitan Life could be a landmark development for bondholders. Page 29.

SPECIAL REPORT: MONEY MANAGEMENT

***Pensions & Investments'* annual Scoreboard** survey reveals which investment firms won the most new business in equities, fixed-income, international, real estate and other asset categories. Pages 1, 17.

FINANCING

AT&T, IBM, Colorado and New York City are among pension investors seeking private placement deals. Page 1.

Junk bond investors swap their depressed holdings for assets of greater perceived value. Page 3.

INTERNATIONAL

Foreign bonds are getting a long, hard look from several tax-exempt institutions. Page 2.

Some ADR programs leave issuers disappointed with the results. Page 2.

Wyatt Asset Services' merger with Debatin Associates rounds out its global business plan. Page 24.

Managers and consultants debate the diversification advantages of foreign bonds. Page 27.

REAL ESTATE

RREEF principals ready a strategy to stave off the forced sale of nine properties. Page 3.

The Unisys pension fund breaks the stereotype with its investment in a hotel management company. Page 3.

Controversy surrounds the Texas Teachers system as its real estate officer is relieved of his duties. Page 3.

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Money manager survey mailed

Questionnaires for *Pensions & Investments'* annual survey of the largest institutional investment management firms are in the mail. In order for your firm to be included in the May 20 special issue, completed forms must be returned by Feb. 25. If you have not yet received a questionnaire and wish to receive one, contact Christine Philip, directory coordinator, at (312) 649-5217.

Foreign bond wave rolling

A growing number of U.S. funds taking the plunge

By Margaret Price

Emerging from a year of stellar performance, international bonds are gaining popularity with pension funds and providing a more viable diversification option.

While the Annuity Board of the Southern Baptist Convention, Dallas, hired a money manager for an $80 million global bond account, other funds, including the Pennsylvania State Employes' Retirement System, obtained foreign bond exposure through domestic bond accounts by allowing managers to include a limited amount of foreign bonds.

"U.S. pension investors are asking if they should make long-term, strategic commitments to non-dollar bonds, or, whether they should permit their managers to make tactical allocations to them based on the near-term outlook," said Stephen Francis, general manager in the London office of Fisher, Francis, Trees & Watts. "They're doing both."

Pensions & Investments' annual survey of the largest pension funds revealed that, as of Sept. 30, the Top 200 defined benefit plans had slightly more than $10 billion in international bonds, 67% more than a year earlier. According to *P&I*'s count, 13 of these funds began international bond investing during the 12-month period.

1990 index returns

S&P 500	−3.08%
MSCI EAFE	−23.20
Shearson Lehman Gov't/Corp.	8.29
Salomon World Gov't, ex-U.S.	15.29
Salomon World Gov't	11.98

Source: Rogers, Casey & Associates, Darien, Conn.

Of course, quite a few of even the largest U.S. pension funds still don't use foreign bonds. But a growing acceptance of global/international bonds comes after years of debate on the securities' merits. Some funds, consultants and others questioned whether pension funds should offset dollar-denominated liabilities with non-dollar-denominated assets like foreign bonds. Others also have debated the very attractiveness of foreign/global bonds: whether they add diversification, would enhance returns or belong as a separate asset class.

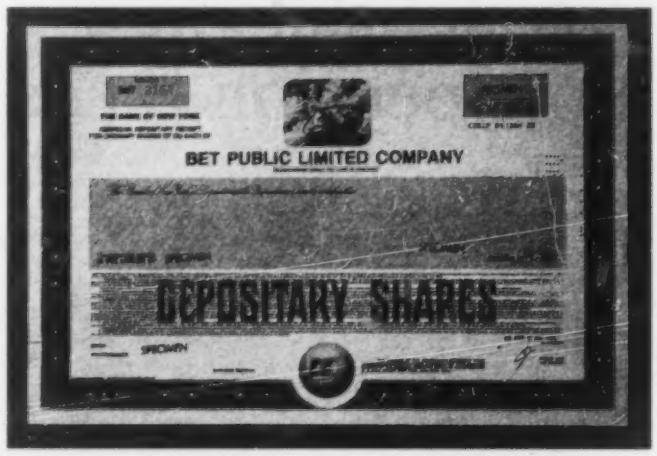
But a variety of factors, including success with overseas equity investments and foreign bonds' outperformance in 1990 against most other asset classes, have spiced foreign bonds' appeal.

The J.P. Morgan Non-U.S. Government Bond Index of 10 foreign government bonds rose 15.6% in U.S. dollar terms for the year ended in December, compared with the J.P. Morgan U.S. Treasury Index's gain of 8.6%, and the Morgan Stanley Capital International Europe Australia Far East Index's 24.7% plunge, without dividends re-invested.

Victor Filatov, vice president and head of the bond index group at J.P. Morgan Securities Inc., New York, said the dollar's decline accounted for about two-thirds of the foreign bond return to U.S. investors. Many expect less or no performance contribution from the dollar this year.

But on the brighter side, some analysts see economic forces driv-

See **Overseas** *on page 27*



ADRs, such as this one for BET PLC, are becoming more popular despite being shunned by large funds and international managers.

Pension funds skip ADR market growth

By Marlene Givant Star

Large U.S. pension funds and their money managers, which represent the bulk of U.S. assets invested abroad, generally have ignored the growing American depository receipt market.

While depository bank executives say demand for ADRs is increasing by leaps and bounds as more domestic investors seek to invest abroad, some issuers are finding ADR programs don't always deliver what the proponents promise — in part because of the lack of interest among international pension fund managers.

Trading volume for 1990 was 3.8 billion exchange-listed ADRs with a value of $75 billion, a 25% increase from 1989's 3.2 billion ADRs with a value of $60 billion, according to the Bank of New York. The 101 new ADR programs for 1990 also was a record; in 1989, 73 programs were launched.

Many big-name multinational companies, such as Hanson PLC, Glaxo Holdings PLC and C.H. Beazer Holdings PLC, have achieved sizable U.S. shareholder bases and liquid trading in their shares through successful ADR programs, but other issuers have not been as fortunate.

Often companies find it difficult to attract new institutional investors. The biggest U.S. international investors tend to hold ordinary shares as opposed to ADRs, which are receipts for shares of a foreign company that are traded in the United States.

ADRs are 80% owned by institutions, including some of the largest in the United States, but these firms are not the biggest investors abroad.

Companies unsure about whether to start a program should "resist with fortitude the blandishments of those siren voices telling them that Wall Street is

See **ADRs** *on page 25*

Indexing still flexing its muscle

By Fred Williams

Despite uncertainties in financial markets during 1990, indexing continued to gain favor among investors during the second half of the year with the international sector still leading the way.

International equity indexing was up 10.2% in the six months ended Nov. 30, to $23.762 billion from $21.554 billion. That surge came despite the dismal, −15%, performance of the Morgan Stanley Capital International Europe Australia Far East Index. When adjusted for that decline, international equity indexing showed an impressive 29.7% increase.

Domestic equity funds decreased 1.8% during the period to $172.726 billion, but that represents an 8.3% gain when adjusted for the market. The Standard & Poo. 500 Stock Index was down 9.34% for the period June 1 through Nov. 30.

On the fixed-income side, domestic fixed-income funds increased 10.2% to $74.263 billion, or 3.8% adjusted for market, from $67.401 billion in May. The Shearson Lehman Brothers Government/Corporate Bond Index was up 6.1% for the six months ended Nov. 30.

International fixed-income funds increased 9.7% to $1.213 billion, a market-adjusted −2%, from $1.106 billion in May. The Salomon Brothers World Government Bond Index was up 11.9% for the six months ended Nov. 30.

As of Dec. 1, 50 leading index managers surveyed by *Pensions & Investments* reported $271.964 billion in total indexed assets under management, a decrease of 1.7% from the $276.681 billion reported May 31. Most of the slip-

See **Indexing** *on page 30*

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Equity ■ Balanced ■ Fixed Portfolios

Plan consolidation spurs manager hires

By Marlene Givant Star

STAMFORD, Conn. — ASEA Brown Boveri, the Swedish power engineering company, has just completed the merger of three thrift plans, including a plan of its U.S. subsidiary, Combustion Engineering Inc.

The consolidation, completed in January, created one plan totaling more than $310 million. Previously, ABB's $30 million in defined benefit assets were merged with the much larger Combustion Engineering pension plan to total $645 million.

The consolidation of the thrift plans was spearheaded by Eric W. Wood, director-pension and thrift management, who joined the company from NYNEX Corp. in the first half of 1990 shortly after the acquisition.

The new thrift plan offers six different investment options, including international stock investment.

"Multiple thrift plans were consolidated to one ABB plan with an expanded amount of investment options, and we selected investment managers within each that would maximize investment return and employee participation," Mr. Wood said.

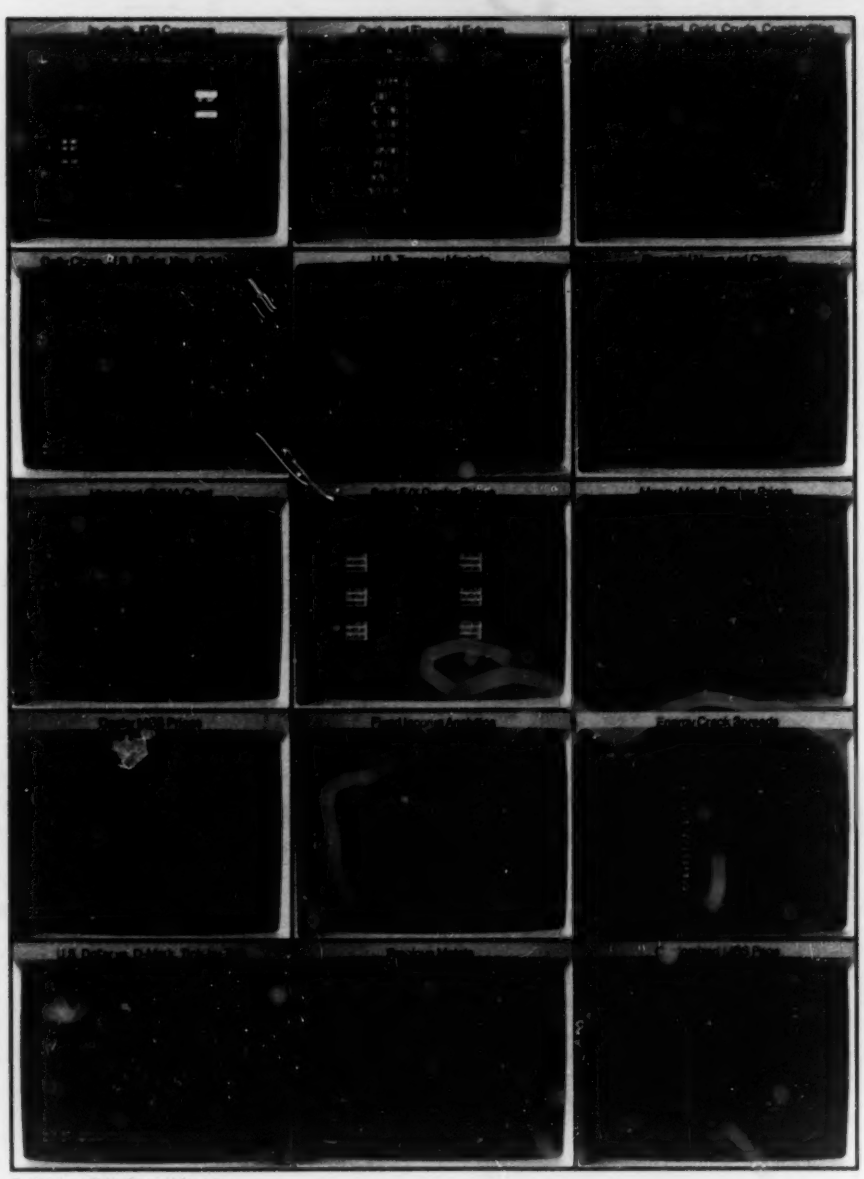
Although the change is not expected to save money, so far it looks as though it has attracted a large number of new participants.

Under the old format, 65% to 70% of those eligible participated. But already "there are indications that has significantly increased to 85% to 90%. We're very, very encouraged. We're really happy with that," said Mr. Wood.

The investments have been allocated to managers as follows: a short-term income fund will be managed by Dimensional Fund Advisors, Santa Monica, Calif.; a conservative equity fund and a balanced fund will be run by The Vanguard Group of Investment Cos., Valley Forge, Pa.; an aggressive equity fund will be run by Fidelity Investments, Boston; and

See **Hires** *on page 28*

The Big Picture.



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CORRECTIONS & CLARIFICATIONS

• A photo in the Jan. 21 issue was identified incorrectly as **Stephen A. Ross** of Roll and Ross Asset Management Corp., Blue Bell, Pa. The correct photo is published at right.

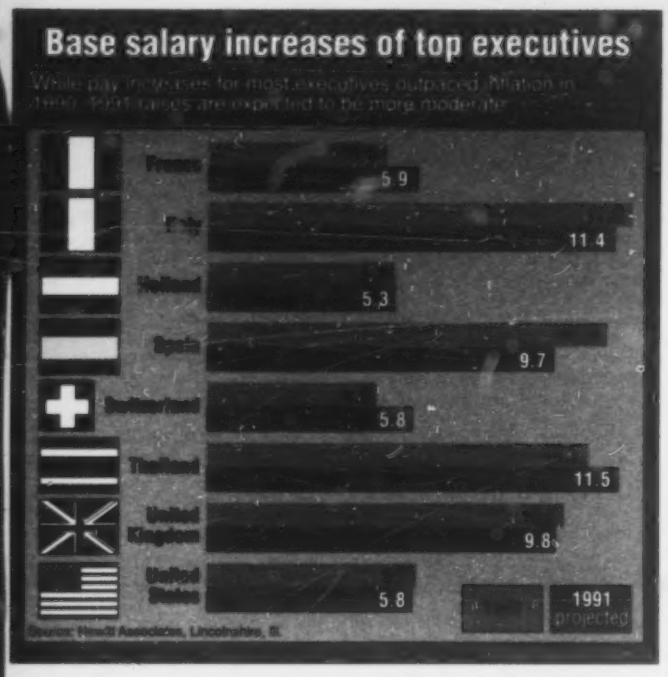
S. Ross

• The **Department of Labor** would permit employer stock to be used as an investment option in participant-directed defined contribution plans, but it would not qualify as one of three safe harbor options as reported in the Dec. 24 issue.

A Labor Department official erred in saying employer stock would qualify as one of three safe investment vehicles under the department's draft proposed 404(c) regulation. Employer stock would have to be offered in addition to the safe harbor vehicles for an employer to avoid fiduciary liability for individual account retirement plans.

Also, the draft regulation would become effective six months after a final rule is promulgated. The draft regulation was sent to the Office of Management and Budget Jan. 8 for review.

• **NYNEX Corp.**'s defined contribution assets were reported incorrectly in the company's Jan. 21 profile. As of Sept. 30, the company had $2.497 billion in defined contribution assets, of which $5.3 million was in a leveraged ESOP.



COMPENSATION

Raises topped inflation worldwide

■ Most executives around the world were pleasantly surprised with the increase in their base compensation in 1990, but 1991's raises are expected to be more moderate.

"In every surveyed country, executive pay increases on average outpaced inflation in 1990, making it another good year for top executives," said Paul Howes, an international consultant with Hewitt Associates, Lincolnshire, Ill., which published the results of its survey of top executives and other employee groups in 16 countries.

In 1991, real income growth is expected to slow as employers become more concerned about economic prospects, he said.

Executives in Italy, Spain, Thailand and the United Kingdom received higher than expected increases last year at 11.9%, 11.2%, 10.7% and 10%, respectively.

Those four countries, however, also reported the highest provisions for inflation, ranging from a low of 6.4% in Italy to 7.8% in the United Kingdom.

For executives in the United States, the average increase in base salary was 5.9%, with a 4% inflation rate.

INTERNATIONAL

Year still bright despite gloomy 4th quarter data

■ Median non-U.S. and global equity portfolios in The WM Co.'s universe lagged far behind market indexes during the fourth quarter but outperformed them for the year.

The median non-U.S. portfolio returned 5.5%, while the Morgan Stanley Capital International Europe Australia Far East Index returned 10.8% and the FT-Actuaries Europe-Pacific Index returned 11.6%. The weighted average return of non-U.S. portfolios tracked by WM was 5.7%.

The median global portfolio returned 5.3%, compared with 9.9% for the MSCI World Index and 10.6% for the FT-Actuaries World Index. The weighted average return of global portfolios was 4.8%.

For the year, the median non-U.S. portfolio declined 14%, compared with a 23% drop in the EAFE index and a 23.8% decline for the FT-A EuroPac. The weighted average of non-U.S. portfolios tracked by WM posted a drop of 11.4%.

The median global portfolio in the WM universe dropped 10.4% for the year, while the MSCI World Index was down 16.3% and the FT-A World Index lost 17.1%.

Underexposure to the Japanese market hurt portfolios' relative performance in the fourth quarter but helped it for the year, according to Callum Robertson, WM research and support analyst. Portfolios in the universe underperformed the local indexes in most markets in the fourth quarter; returns vs. local indexes were mixed for the year. High liquidity and high exposure to Continental markets also benefited full-year returns.

REAL ESTATE

Barlow seeks new role for her firm

■ Susan Barlow, former managing director of the real estate consulting division of Callan Associates Inc., said she is starting a firm that will act as a fiduciary as well as a real estate consultant for pension funds.

The dual role Ms. Barlow will take at her new firm, as yet unnamed, could be at the vanguard of what other consulting firms will do.

Most executives for penston consulting firms say they now act as consultants but not fiduciaries. Some, however, have been considering taking on the fiduciary role, where they would have much greater control over pension fund real estate assets and real estate advisers.

Because her new firm will act as a fiduciary, Ms. Barlow said she is seeking Securities and Exchange Commission status as a registered investment adviser.

But rather than act as fiduciary/consultant for all of a pension fund's real estate assets, she said her firm will focus on private placement-like real estate deals where pension fund financing will replace bank or private financing for real estate companies.

She said she will be looking at joint venture or co-investment deals where an operating company invests its own money but wants a pension fund as a financing partner.

She said her fees should be lower than the cost of a separate real estate adviser and consultant. She expects to have an office open in Irvine, Calif., in March.

Susan Barlow is in the process of starting her own real estate consulting firm.

NUCLEAR TRUSTS

Supporters call bill's chances good

■ This may be the year Congress passes a bill to ease investment restrictions on nuclear decommissioning trusts and lower taxes on the trusts' earnings.

The bill has been proposed for two years, but languished until late last session when the House Ways and Means Committee passed it in October. The bill failed to reach the full House because of the budget impasse.

The bill calls for a broader range of investment options than the "black lung" limitations of U.S. Treasuries, certain bank certificates of deposit and municipal bonds. The bill also seeks a reduction of the tax on investment earnings to 22% and ultimately 20% from the current 34%.

The trusts are to pay for the eventual decommissioning and decontamination of the country's 114 nuclear power plants. The total cost is expected to be upwards of $60 billion.

Easing investment restrictions and lowering the tax rate are designed to help the utilities meet the costs. "Our chances are excellent," said Rob Heartwell, an aide to the bill's sponsor, Rep. Richard Schulze, R.-Pa.

PEOPLE

Execs named to fill regulatory posts

■ Two key federal regulators overseeing securities markets and pens.on plans have been appointed.

William H. Heyman, a managing director of Smith Barney, Harris Upham & Co. Inc., has been named deputy director of the Securities and Exchange Commission's division of market regulation. This is a new post.

Separately, John E. Burke became the Internal Revenue Service's assistant commissioner for employee plans and exempt organizations, the top IRS job dealing exclusively with benefit plans. Previously, he was director of the IRS' Greensboro, N.C., district.

Mr. Burke succeeded Robert Brauer, who has become director of the Pittsburgh district.

BENEFITS

Agencies announce limits for 1991

■ For 1991, the maximum annual benefit payable under a defined benefit plan is $108,963, up from $102,582, the Internal Revenue Service announced.

The limit, under Section 415 of the Internal Revenue Code, affects only funding of pension plans. The limit is adjusted for inflation annually.

The ceiling for contributions to a defined contribution plan remains at $30,000. That figure will not be adjusted until the defined benefit plan limit exceeds $120,000.

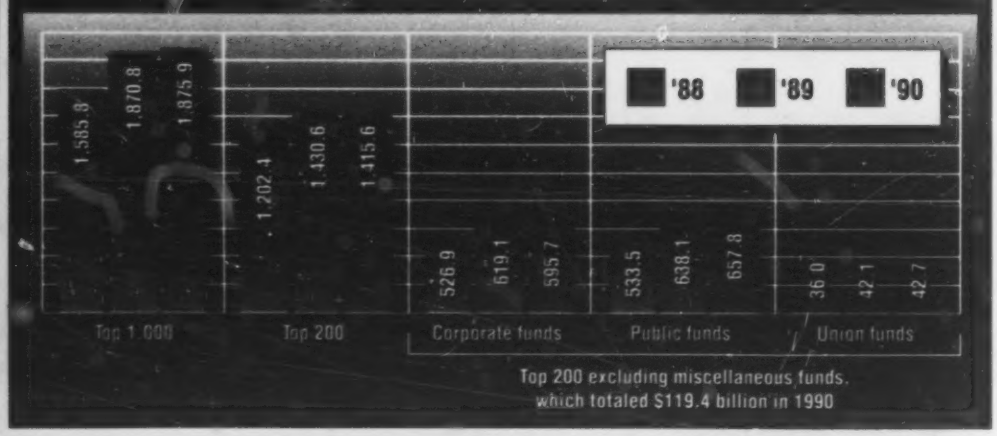
The Pension Benefit Guaranty Corp. announced the maximum monthly benefit it will guarantee for single-employer defined benefit plans terminating in 1991 is $2,250, up from $2,164.77.

CORRECTIONS

Figures for the total and breakout between defined benefit and defined contribution assets for the Top 1,000 employee benefit funds were reported incorrectly Jan. 21. The correct numbers, shown in bold, are total assets of $1.876 trillion, of which $1.466 trillion is defined benefit and $391.4 billion is defined contribution.

Profile statistics at a glance
($ billions)

	1989	1990
Top 1,000 assets	**1,875.9**	1,870.8
Defined benefit	**1,466.8**	1,480.8
Defined contribution	**391.4**	374.0
Top 200 assets	1,415.6	1,430.6
Top 100 assets	1,182.5	1,198.2
Top 50 assets	924.8	940.0
Top 25 assets	678.6	690.1
Top 200 defined benefit	1,124.4	1,159.8
Top 200 defined contribution	272.6	265.3
Top 200 profit sharing	11.1	14.5
Top 200 401(k)/thrift	50.2	85.2



Money center banks' exposure to highly leveraged transactions

BankAmerica	2,400	157	6.5	43.0
Chase Manhattan	4,623	55	1.2	126.0
Citicorp	7,773	1,044	13.4	90.3
Manufacturers Hanover	3,350	87	2.6	112.9
Security Pacific	4,500	171	3.8	99.8
Composite values	65,924	3,946	6.0	78.4

Source: Kidder Peabody & Co. Inc., New York. Graphic by Kimberly Mart

BANKING

Leveraged deals a four-letter word in lending circles

■ More red flags are being raised about highly leveraged transactions or HLTs, one of the more dreaded acronyms in banking.

A Kidder, Peabody & Co. research report warns HLT credits will deteriorate industrywide in the months ahead as many leveraged buy-out deals and other debt-laden companies falter amid an economic downturn.

The investment bank expects to see a doubling if not a tripling in HLT non-performers by year-end 1991. As of Sept. 30, HLT non-accrual loans totaled $3.9 trillion, or 6% of total HLT loans outstanding in the Kidder, Peabody 35-bank universe.

Kidder, Peabody thinks HLT non-performers should show greater percentage increases than commercial real estate non-performers, which already range between 10% and 25% of real estate loans outstanding.

In a recession, Kidder, Peabody warns, some 30% of LBOs would likely default and banks, as senior debtors, are likely to lose some 30% of their principal.

The firm studied 30 different companies' senior LBO bank loans in the secondary market and found the average discount to par was 35%, but ranged from 75% to 3%. Seventeen of the 30 credits traded at a discount to par of more than 30%.

Federal regulators are expected to require banks to reallocate a portion of their reserves toward their HLT portfolio. Many analysts believe most banks' reserve levels are inadequate today.

INTERNATIONAL

Few positives among index markets

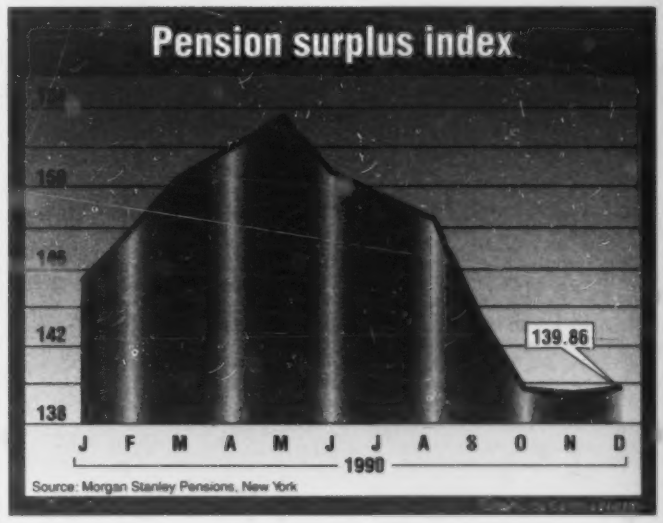
■ The Morgan Stanley Capital International World Index lost 18.7% in U.S. dollar terms in 1990, with only three of the 20 markets in the index showing positive returns.

The top performers were the United Kingdom, up 6%; Austria, up 5.2%; and Hong Kong, up 3.7%. New Zealand was at the bottom with a loss of 40.3%, and finishing just above it were Japan, down 36.4%, and Finland, down 33.3%.

Among major regions of the index, North America was down 6.4%, Europe was down 6.5%, and the Far East, 35.4%.

Among the 17 emerging and other markets followed by Morgan Stanley but outside the World Index, those posting positive returns were Greece, up 86.6%; Mexico (Free), including only securities without ownership restrictions, up 58.4%; Mexico overall, up 45.7%; Chile, up 20.2%; and Indonesia, up 5.2%. Morgan Stanley's Emerging Markets Free Index lost 13.8% in dollar terms. The index excludes markets where a substantial portion of shares are not available to non-domestic investors.

The dollar fared poorly in 1990, with 15 of 19 major world currencies appreciating against it. Twelve currencies had double-digit appreciation.



CASH MANAGEMENT

3 execs outline their methods to boost profits

■ Three corporate treasury managers have found ways to put profit on company doorsteps with short-term cash investments.

A conscientious approach to short-term investing and financial flexibility are the keys to earning profit without additional risk, according to the assistant treasurers from Litton Industries Inc., CSX Corp. and BET USA Inc., who spoke at the National Corporate Cash Management Association conference last fall. The three are responsible for a combined $2.3 billion in short-term investments.

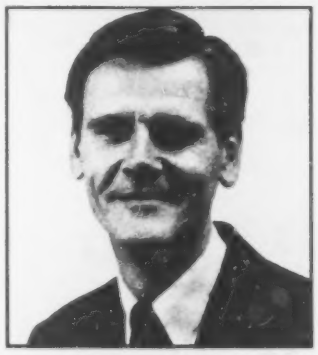
Michael Keane, assistant treasurer at Litton, said his company has "detailed investment guidelines . . . which form the basis for investment" of its $1.2 billion short-term portfolio.

Eric Norman, assistant treasurer at CSX, agreed guidelines must be in place and adhered to, but should be flexible. Rather than compiling an approved list of investment vehicles, he uses credit ratings, which permits the use of new investments as they come to market.

"When a new security comes out, generally the brokers . . . give you prices allowing you a better return in order to get that (investment) out into the marketplace. Generally, that's the best time to get into a new security," he said.

Debra M. Duffy, assistant treasurer at BET USA, said operating a treasury department as a profit center does not require a large staff. Indeed, CSX has a three-person treasury staff; Litton, nine; and BET, six.

She said BET seeks a return of "30 basis points over our cost of funds . . . and because of that, we have a lot of opportunities and options in the market to accomplish that goal."



BET USA's Debra Duffy, from top, Litton's Michael Keane and CSX's Eric Norman are squeezing extra returns out of their respective companies' short-term cash portfolios.

ECONOMICS

Heavy debt load throws economy out of balance

■ The U.S. economy is in a "balance sheet recession" that could be longer and deeper than anyone expects, according to economist A. Gary Shilling.

Mr. Shilling, speaking at a Fiduciary Management Associates conference in Chicago, noted his economics consulting firm's holiday gift to clients was a T-shirt with the slogan, "Forget GNP and income statements . . . watch the balance sheets."

Many corporate and personal balance sheets have problems, he said: there is a mound of uncollateralized corporate debt; junk bonds have collapsed; banks, savings and loans, insurance companies and credit unions are having difficulties; and many consumers have excessive debt.

There are many ways the balance sheet recession could transfer to the income and spending side of the ledger and create a long, deep recession, Mr. Shilling said.

For instance, many manufacturing companies are laying off employees more rapidly than in other recessions, and service industries are having layoffs, too. "Obviously, the guy who's got a lot of debt and is laid off is one cautious consumer," he said. The credit crunch also will make it harder for the Federal Reserve to stimulate the economy, he said.

The downturn is global, Mr. Shilling said, adding a true depression is more likely in Japan than in the United States.

The situation in Japan looks like the one in the United States during the 1920s — an emerging global power and an exporter of capital, now experiencing a collapse in its real estate and stock markets.

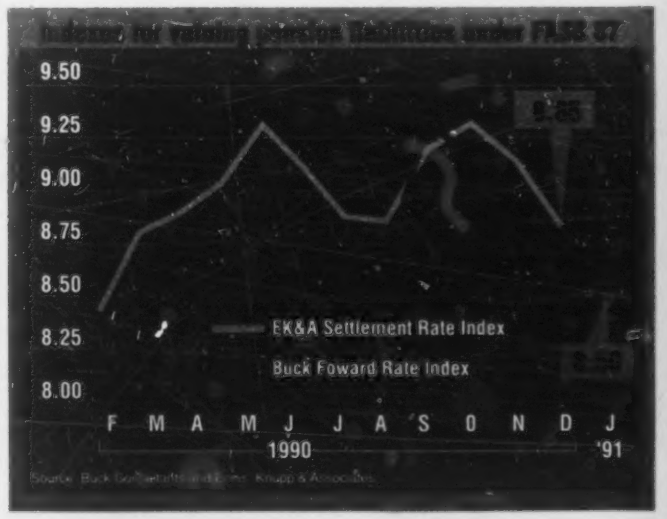
PROXIES

Directory reveals who's really who

■ With proxy season around the corner and the possibility hostile takeovers might heat up again, the American Society of Corporate Secretaries, New York, is heavily marketing "The Nominee List." The directory contains more than 12,000 nominee or street names, an alias of sorts used by the real owners of corporate stocks to hide their identities.

A shroud of secrecy has long cloaked the identities of these shareholders, whose stock is held by custodians and beneficial owners. If a merger is proposed or a proxy contest occurs, there is a flurry of activity as corporate secretaries, investor relations officers, proxy solicitors, transfer agents and bank trust or custody officers all try to reach as many shareholders as possible.

While companies have their own shareholder lists, it's usually difficult for the other side to get them. The use of street names makes a hard job even tougher because there is no complete list of all nominee names.



Industry can't rest on laurels in new decade

By Curtis Vosti and Terry Williams

Demographic, economic and client-demand changes will dramatically reshape the investment management community during the rest of this decade.

And, of course, the omnipresent wild card of governmental fiats also will form the basis of what many agree will be a fiercely competitive industry, with shakeouts and consolidations molding new management structures.

Nonetheless, observers say, firms can be successful in the 1990s by:

- positioning themselves to take advantage of increased international and alternative investing through organizational efficiencies and proprietary investment schemes;
- finding specialized niches, if small, or being broad enough to efficiently offer a variety of services;
- being able to capture international and non-core asset growth, increasing defined contribution assets and retiree health programs; and
- expecting downward pressure on investment management fees, but using performance-based fees to ease the pressure.

"There's no reason our industry should be different from any other professional firm operating in a maturing industry," said Charles Salisbury, managing director of T. Rowe Price Associates Inc., Baltimore.

"The business is not a cornucopia with money pouring out at us, but it will continue to grow," said Robert G. Wade, chief investment officer with Chancellor Capital Management, New York.

The growth of investment management business was driven in the 1970s largely by the growth of defined benefit assets after the passage of the Employee Retirement Income Security Act of 1974. In the 1980s, boutiques by the dozens sprouted to take advantage of equity returns annualized at 17.57% per year.

In the 1990s, the industry faces retrenchment with the likelihood of lower returns and lower, if not stagnant, defined benefit growth. Yet, defined contribution assets, new products and international investing hold promise as growth areas.

Boutiques and smaller firms in particular face steep capital barriers to keep pace with increasing demands of better educated and more demanding plan sponsors in an industry with excess capacity.

"The smaller firms — those with less than $500 million under management — unless they have an exceptional competitive advantage and value-added products, will not be able to survive on their own. They will merge or exit the business," said Martin D. Sass, chief investment officer of M.D. Sass Investors Services Inc., New York.

"It has become very complicated, very labor intensive. It favors the larger firms," said Brian Wruble, chief executive officer of Equitable Capital Management Corp., New York. "Marshaling those forces is not something boutiques can do."

Most industry professionals, however, admit there is always room for entrepreneurs who, at least initially, can avoid large capital needs. "To me, it's always been a dog-eat-dog market," said Ted Aronson, chief investment officer at Aronson + Fogler, Philadelphia, a 7-year-old boutique. Because growth needs are not as great for boutiques as for large firms, he said, they are not as affected by macroeconomic forces.

John Bogle, chairman of the board of The Vanguard Group of Investment Cos., Wayne, Pa., says he expects by 2000 there could be more than 40 new investment firms among the top 300 in terms of assets under management. Perhaps parochially, however, he doesn't see those firms threatening the natural affinity mutual fund companies, like Vanguard, have for the growing assets of defined contribution plans.

Those plans allow participants greater control over personalized retirement accounts, and require integrated service capabilities, like daily valuations and record keeping, which are costly but necessary.

"Everybody likes one-stop shopping," said Equitable's Mr. Wruble. "Having it, it's hard to give up."

Demographic factors, like an aging population that saves more will make wealthy individuals, who previously took care of their own investments, an attractive target for investment advisers, according to Chancellor's Mr. Wade.

George Perry, vice president of corporate strategy and development for IDS Financial Services, Minneapolis, sees the beginning of an intergenerational transfer of

See **Future** *on page 21*

SCOREBOARD

Net dollar gain

Top managers over $10 billion overall

Firm	$ millions
State Street Bank	8,896
Bankers Trust	6,093
Fidelity Investments	2,880
Pacific Investment Mgmt.	2,464
ANB Investment Mgmt.	2,100
Vanguard Group*	2,038
Wells Fargo Nikko	1,823
Oppenheimer Capital	1,583
Prudential Fixed Income Advisors	1,122
Security Trust	1,078

Top managers $1 billion to $ 10 billion

Firm	$ millions
Hartford Life	1,427
Investment Advisers	1,279
CNA Insurance	1,132
Provident Nat'l Assurance	1,100
AMR Investment Services	1,090
Advanced Investment Mgmt.	1,050
Smith Barney Capital Mgmt.	1,031
Heitman Advisory	1,020
Western Asset Mgmt.	1,015
J & W Seligman	870

Top managers $250 million to $1 billion

Firm	$ millions
Hyperion Capital Mgmt.	518
HD International	406
INTECH	364
Metric Institutional Realty	320
GeoCapital	315
Turner Neill Investment	310
Karsten Realty Advisors	270
Harris Bretall Sullivan & Smith	267
Grubb & Ellis Realty	250
PCM International	249

Top managers under $250 million

Firm	$ millions
First Wisconsin Trust	194
Martingale Asset Mgmt.	162
Devon Institutional Realty	147
Cutugno & Associates	136
AMB Institutional Realty	111
Hourglass Capital Mgmt.	108
Twin Capital Mgmt.	106
Cisneros Asset Mgmt.	105
Duncan-Hurst Capital Mgmt.	105
Progress Investment Mgmt.	105

*Manager of managers

Most new equity business (net)

Top managers over $10 billion

Firm	$ millions
State Street Bank	2,394
ANB Investment Mgmt.	1,500
Oppenheimer Capital	1,222
Wells Fargo Nikko	1,206
Vanguard Group*	738
INVESCO Capital Mgmt.	460
Bankers Trust	416
Jennison Associates Capital	365
Fayez Sarofim	300
Brinson Partners	212

Top managers $1 billion to $10 billion

Firm	$ millions
Advanced Investment Mgmt.	1,050
Boston Co. International	903
Investment Advisers	868
J & W Seligman	770
Provident Investment Counsel	709
Rosenberg Institutional Equity	583
Smith Barney Capital Mgmt.	509
Newbold's Asset Mgmt.	502
Columbus Circle Investors	449
Barrow, Hanley, Mewhinney & Strauss	448

Top managers $20 million to $1 billion

Firm	$ millions
INTECH	364
GeoCapital	315
Investment Research	232
Spare, Tengler, Kaplan & Bischel	228
Sasco Capital	221
Harris Bretall Sullivan & Smith	179
David L. Babson	110
Turner Neill Investment	110
Cadence Capital Mgmt.	96
Roger Engemann & Associates	95

Top managers under $250 million

Firm	$ millions
Twin Capital Mgmt.	106
Duncan-Hurst Capital Mgmt.	105
Jacobs Levy Equity Mgmt.	80
Progress Investment Mgmt.	80
Martingale Asset Mgmt.	76
Scimtar North American	75
Richard Fontaine Associates	68
Carl Domino & Associates	62
Taplin, Canida & Habacht	57
CIC Asset Mgmt.	53

*Manager of managers

Most new fixed-income business (net)

Top managers over $10 billion

Firm	$ millions
Pacific Investment Mgmt.	1,854
Metropolitan Life	1,747
Bankers Trust	1,719
Fidelity Investments	1,136
Prudential Fixed Income Advisors	1,122
Chancellor Capital Mgmt.	1,010
Vanguard Group*	883
Fischer, Francis, Trees & Watts	665
Security Trust	568
Lincoln Capital Mgmt.	456

Top managers & $1 billion to $10 billion

Firm	$ millions
Western Asset Mgmt.	1,015
Harris Investment Mgmt.	664
Standish, Ayer & Wood	592
WR Lazard & Co.	535
Goldman Sachs Asset Mgmt.	446
Bear Stearns Asset Mgmt.	440
Payden & Rygel	440
Kemper Asset Mgmt.	423
Merganser Capital Mgmt.	400
ASB Capital Mgmt.	385

Top managers $250 million to $1 billion

Firm	$ millions
Hyperion Capital Mgmt.	518
Magten Asset Mgmt.	189
Morgan Grenfell Capital Mgmt.	156
Weaver C. Barksdale	116
OFFITBANK	113
Turner Neill Investment	100
Bridgewater Group**	61
Continental Asset Mgmt.	60
Seaboard Investment Advisers	51
First Coast Capital Mgmt.	40

Top managers under $250 million

Firm	$ millions
Cutugno & Associates	113
Cisneros Asset Mgmt.	105
First Wisconsin Trust	87
Gabelli-O'Connor Fixed Income Mgmt.	78
Charles River Mgmt.	55
Bank of Ireland Asset Mgmt.	40
Income Research & Mgmt.	25
Progress Investment Mgmt.	25
Jamison, Eaton & Wood	23
Dorsey & Co.	20

*Manager of managers
**Manager of overlay program

Marketing, visibility vital tools

By Mike Clowes

NEW YORK — The 1990s will be difficult for the investment management business, but it still is possible to start a successful money management firm, according to Michael Goldstein, security analyst at Sanford C. Bernstein & Co. Inc.

The analyst, who last year published a highly regarded study — "The Future of the Money Management Industry" — said he still would start a money management firm today, if he were so inclined.

"I still think it's a very good business. You have to know a lot more about marketing, because that's the key to the business at this point. And you have to have a plan. The ability to build a firm that serves the individual segment is good — I still think that's a regional market and a start-up can be regional and do great.

"A new firm entering the defined contribution market can still have an impact, but I don't think they are going to crack the top four. Success feeds upon itself. The client list (of the top four firms) is longer and longer so the sale is easier and easier and the costs come down.

"I would buy the highest visibility small (mutual) fund (firm) I could find, someone who has a great track record and two funds. Then I would hire 10 marketers right away and I would go and buy the (administrative and record-keeping) systems from somebody else. The key would be buying a real visible equity track record."

But, Mr. Goldstein said, trends in the industry favor the large diversified money management firms that have some form of proprietary distribution — through mutual funds, brand name recognition or a large sales force.

The key trends, he said, are the overfunding of defined benefit plans, which remains great even

See **Tools** *on page 20*

International growth spread across spectrum

By Trudy Ring

Diversity was the name of the international investing game in 1990; much business went to traditional core strategies, both passive and active, but a fair amount also went to specialized index funds, regional portfolios and emerging markets.

Managers responding to *Pensions & Investments'* Scoreboard survey reported $17.1 billion in new international and global assets under management for U.S. tax-exempt investors in 1990. This included $12.8 billion in equities, $3.9 billion in bonds and the remainder in other asset classes.

For firms with more than $10 billion in tax-exempt assets under management, State Street Bank & Trust Co., Boston, led with $2.382 billion in new international and global business, of which $2.315 billion was in equities.

Of the equity component, $1.595 billion was indexed, but only $873 million was pegged directly to the capitalization-weighted Morgan Stanley Capital International Europe Australia Far East Index; the remaining $722 million had the EAFE markets weighted according to gross domestic product or excluding companies operating in South Africa.

The remainder went to equity strategies that used active management of country allocations, stock selections within countries or both.

Turmoil in the Japanese stock market has spurred a trend away from cap-weighted EAFE index funds, said Peter Braun, vice president and director of marketing for asset management. "Japan was a very unattractive place to be last year," he said. Japan's capitalization weight in the EAFE is close to 50%; a GDP weighting is about 33%.

State Street's international bond strategy, which attracted $67 million in new assets, is indexed to the Salomon Brothers Non-Dollar Government Bond Index.

Bankers Trust Co. — Investment Management Group, New York, ranked second among the largest firms with $1.618 billion in new international/global business, all but $100 million in equities. About $1.2 billion of the new equity business was indexed, and overall, the new equity accounts were for core products. "With us, it's been pretty much core EAFE Index and core traditional EAFE-benchmark active strategies," said Alexander R. Mount, vice president-international products marketing.

Its fixed-income strategies are active, with choices of hedged or unhedged, seeking to add value through minor duration shifts.

At Wells Fargo Nikko Investment Advisors, San Francisco, its $1.567 billion in new international equity business was all indexed. This reflects continued growth in EAFE funds, but also some use of strategies pegged to other indexes, such as the slightly broader FT-Actuaries Europe-Pacific Index, said Patricia Dunn, president. Increased international investing by public funds spurred growth in South Africa-free indexing, she added.

Some clients seeking to invest in Japan while avoiding its market problems went with tilted Japanese index funds, which screen stocks for various factors, Ms. Dunn said. Also, Wells Fargo Nikko gained $371 million in new business with a Japanese asset allocation strategy, following a model similar to its domestic asset allocation products.

For firms with $1 billion to $10 billion under management, Oechsle International Advisors, Boston, led with $858 million in new international business, all but $50 million in equities. An active manager primarily using the EAFE markets, Oechsle had such success primarily because of its performance record and that it is an owner-operated firm, said Steve Langer, partner.

"A plan sponsor likes feeling that his portfolio manager is intimately tied to the company," Mr. Langer said.

Track record and stability also benefited Rowe Price-Fleming International Inc., Baltimore, which placed second in the category with $829 million, said George Murnaghan, vice president.

New business was split almost evenly between equities, $417 million, and bonds, $412 million. One large account boosted the bond total, Mr. Murnaghan said. The bulk of the business was for core active strategies.

Other firms, across all size categories, with large amounts of new international/global bond busi-

See **Foreign** *on page 21*

GIC/BIC growth hits turbulence

By Fred Williams

The growth in discretionary guaranteed investment assets stalled in 1990 as new business reported by industry leaders took a dramatic nosedive from the impressive gains made in 1989.

Net new business gained by managers of guaranteed and bank investment contracts dropped to less than half that of 1989. According to the *Pensions & Investments* Scoreboard survey, the top five firms picked up a total of $3.66 billion in new business in 1990. The same five managers gained $8.99 billion in new business in 1989.

See **Growth** *on page 22*

SCOREBOARD

Most new GIC/BIC business (net)

Banks & insurance companies

Firm	$ millions
Bankers Trust	1,722
Hartford Life	1,390
CNA Insurance	1,132
Provident Nat'l Assurance	1,100
Allstate Life Insurance	714
John Hancock	597
New York Life	509
Crown Life Insurance	462
State Street Bank	336
Great-West Life	145

GIC portfolio managers

Firm	$ millions
Fidelity Investments	1,323
PRIMCO Capital Mgmt.	850
Certus Financial	700
Morley Capital Mgmt.	456
IDS Trust	332
Fiduciary Capital Mgmt.	158
Vanguard Group*	107
ASB Capital Mgmt.	35

*Manager of managers

SCOREBOARD

Most new international/global business (net)

Top managers over $10 billion

Firm	$ millions
State Street Bank	2,382
Bankers Trust	1,618
Wells Fargo Nikko	1,567
Pacific Investment Mgmt.	487
Brinson Partners	312
Fidelity Investments	242
GE Investments	144
Capital Guardian Trust	143
Travelers Corp.	140
Metropolitan Life	113

Top managers $1 billion to $10 billion

Firm	$ millions
Oechsle International Advisors	858
Rowe Price-Fleming International	829
Globe Finlay	815
Acadian Asset Mgmt.	680
Global Fixed Income Advisors	598
WorldInvest	460
Schroder Capital Mgmt. International	443
Putnam	433
Scudder, Stevens & Clark	423
Payden & Rygel	300

Top managers $250 million to $1 billion

Firm	$ millions
HD International	406
PCM International	249
Lombard Odier International	222
Yamaichi International	215
Marvin & Palmer	170
Hill Samuel/Investment Advisers	167
Daiwa International Capital	152
Bridgewater Group*	122
G.T. Capital Mgmt.	115
OFFITBANK	114

Top managers under $250 million

Firm	$ millions
Emerging Markets	87
Dillon, Read International	76
Wardley Investment Services	30
Bank of Ireland Asset Mgmt.	29
Cutugno & Associates	23
Prudential Asia	13
Henderson International	11
Spectrum Asset Mgmt.	6
Murray Johnstone International	5
Credit Suisse Asset Mgmt.	2

*Manager of overlay program

Most new real estate business (net)

Top managers over $10 billion

Firm	$ millions
Equitable Real Estate	349
John Hancock	163
GE Investments	80
Security Trust	60
Metropolitan Life	47
State Street Bank	20

Top managers $1 billion to $10 billion

Firm	$ millions
Heitman Advisory	1,020
Yarmouth Group	815
TCW Realty Advisors	715
CGR Advisors	600
LaSalle Advisors	529
O'Connor Group	471
RREEF	278
Mellon/McMahan Real Estate	170
Bear Stearns Asset Mgmt.	160
Prudential Real Estate	144

Top managers $250 million to $1 billion

Firm	$ millions
Metric Institutional Realty	320
Karsten Realty Advisors	270
Grubb & Ellis Realty	250
Bennett & Kahnweiler Realty	213
Wells Fargo Realty	171
PMRealty Advisors	170
Lehndorff & Babson Real Estate	157
Schroder Real Estate	101
PSI Institutional Realty	35

Top managers under $250 million

Firm	$ millions
Devon Institutional Realty	147
AMB Institutional Realty	111
Batterymarch: Agrivest	100
Birtcher Realty Advisors	90
Resource Investments	67
Eastern Realty Investment	17
D.A. Management	9
American Agricultural Investment	2

Most new balanced business (net)

Top managers over $10 billion

Firm	$ millions
Bankers Trust	618
INVESCO Capital Mgmt.	333
Oppenheimer Capital	317
Fayez Sarofim	284
Vanguard Group*	216
Boatmen's Trust	182
NCNB	154
Security Trust	147
Fidelity Investments	142
ANB Investment Mgmt.	100

Top managers $1 billion to $10 billion

Firm	$ millions
Boston Co. International	192
Bear Stearns Asset Mgmt.	180
Munder Capital Mgmt.	175
Provident Investment Counsel	142
ASB Capital Mgmt.	127
Smith Barney Capital Mgmt.	120
Independence Investment Associates	102
First Asset Mgmt.	96
J & W Seligman	90
NWQ Investment Mgmt.	82

Top managers $250 million to $1 billion

Firm	$ millions
RXR Capital Mgmt.	147
Turner Neill Investment	100
Schaenen Wood & Associates	84
Harris Bretall Sullivan & Smith	80
Seaboard Investment Advisers	80
Cowen Asset Mgmt.	65
David L. Babson	55
Davis Hamilton Jackson & Associates	44
Daniel S. Kampel	39
Amervest Co.	37

Top managers under $250 million

Firm	$ millions
Hourglass Capital Mgmt.	72
Jamison, Eaton & Wood	72
Becker Van Etten	50
Fox Asset Mgmt.	46
First Wisconsin Trust	26
NM Capital Mgmt.	23
Scimtar North American	21
Starbuck, Tisdale & Associates	18
Trust Co. of Oklahoma City	16
Jurika & Voyles	15

*Manager of managers

Tools

Continued from page 17
after last year's market decline, and the growth of defined contribution plans. "The upshot of that is that those trends tend to lead to a more consolidated industry than we've seen in the past," Mr. Goldstein said.

Some smaller firms may go out of business, and others will just cease to grow, he said.

"The money management industry is quite an interesting industry in that you had an extended period where you had hundreds of entrants and almost everyone was prosperous. It's unusual for that to go on for 15 or 20 years.

"I suspect the relative competitive intensity of the industry will rise because of the changing mix of growth and a lack of the kinds of exogenous factors that you had driving growth in the (immediate) post-ERISA era."

He said another significant trend was the emergence of price competition in the retail mutual fund industry, particularly in the money market segment.

Money market funds are widely held and are commodity-like, and "the way to gain share, it's been proven when you are a big player, is to cut price because then you have a higher current yield," Mr. Goldstein said.

"I think that's an enormously powerful trend that's just beginning and will radically change that industry in this decade. And that could have a powerful spillover effect elsewhere.

"Already on the retail side it has spilled over from money market funds to virtually every form of fixed-income fund. It's like any other business. The biggest players are trying to use their scale to gain share and lean over on all those smaller players, and it has worked."

Mr. Goldstein said that to be successful in the future, particularly in the pension business, money management firms would have to invest more, especially in marketing.

"It's a business that has had very high returns, and from my perspective it's almost like a spoiled child, they're just not used to investing," he said. "There are very few money managers who think in those terms. That's a very important change in this business — now you have to pay to play, and you never did before.

"You can see that in the evolution of products, like international, where people are investing. And the biggest firms, the top 10 firms or top 20 that I know well are always asking me: What are others doing in international? Should we be investing in it? It's going to cost us a fortune to do this."

Mr. Goldstein said the personal market was the least defined market. "That's the area I get the most questions on from large money managers, and the market is very ill-defined. No one knows how big it is, how fast it grows, or even what it is, and there are really very few competitors. That's where I think you are going to see a much more systematic approach."

He said the wrap-fee approach (in which the client is offered consulting, investment management and brokerage services for a flat fee, often as high as 3% of assets) has been enormously successful, in part because it's a large ill-defined market, and the firms pursuing it have about 70,000 sales people involved in it, of which perhaps 5% to 10% are active.

"Compared with the whole sales capability of the money management industry, 3,000 to 7,000 salesmen is a lot, so it's producing big numbers and it's been a growth area for all of the big retail firms," Mr. Goldstein said.

He said the investment banks are obviously trying to grow in the investment management business, particularly on the Pacific Rim. "They have generations of good will built up worldwide. I think at gaining offshore money they will be successful because of their international capabilities. It's probably one of the best uses for the international networks they've invested hundreds of millions in."

In terms of competing domestically, he said, "I guess more specialty quant products . . . that's where I would expect them to do the best." ■

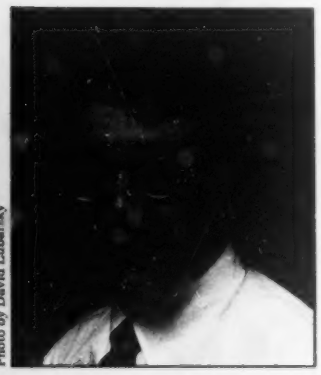


Photo by David Lubarsky

Michael Goldstein sees a difficult business climate ahead for money managers.

How securities companies and money management firms are faring

	Current price*	Price range* (past 12 months)	ROE (1989)
Bear Stearns	10	8-15	15
Salomon	25	20-27	14
PaineWebber	14	11-21	5
Alliance Capital	17	12-17	21
Franklin Resources	30	23-36	43
United Asset Mgmt.	16	12-21	11

*As published in Bernstein Research's January 1991 Capital Markets Quarterly.

HARRIS CONVERSATIONS FOR THE 90s:

MANAGING FOR SUCCESS IN A RECESSION

A ROUNDTABLE DISCUSSION WITH WALTER F. LOEB
and a select group of business leaders.

Retailers, their suppliers, and a host of other companies across corporate America must forge new strategies for reaching customers and maintaining profitability in a sluggish economy.

At the invitation of Harris Bank, Walter F. Loeb, the dean of retail industry analysts, and a select group of retail industry executives recently met to examine the elements of success in recessionary times.

The following discussion, one in a series of conversations with small groups of business leaders and some of today's most exciting thinkers, recently took place at Harris Bank:

We are in a consumer recession. It is a fact. If you look at the leading indicators that I use—catalog sales, men's wear, and durables—each of these "postponable" classifications is weak. The general merchandise inflation rate will run at 3.5 to 4.5% in 1991 and have a severe impact upon earnings. In many parts of the country, the consumer feels house poor; real estate values have dropped, and there are no buyers. I see consumers who have been affected by higher gasoline prices, the threat of lower income, and inflation continuing to worry about these things and being very careful about discretionary spending. I do not see a great many underlying strengths.

Then what does a business do to survive and—even thrive—in such difficult times?

You will have to be lean and mean to weather this economy. It is going to be the low cost operator who is the winner. That is why an entrepreneurial spirit is vital.

By "entrepreneurial," I mean a creative, dynamic spirit that drives the business. Some retailing giants have reached the "bureaucratic stage," where arteriosclerosis sets in, and they have layer upon layer of management to defeat initiative and change. These giants often fight among themselves for share of established markets, while entrepreneurs go out and *create* new markets.

To be successful in this economy you must have initiative. You must challenge yourself to be more productive in existing facilities. That means providing incentives for employees to do more and drawing more business from current customers. Increasing such productivity is the first step in improving profitability, too.

Technology is already an integral part of my business survival strategy for increasing productivity and helping to increase customer service.

Yes, ten years ago the retail industry was still cautiously eyeing computer technology, but today, for the first time, the industry is technology driven. We can now instantly communicate worldwide, transmitting a design from a computer in Hong Kong to a computer in New York so that it can be reviewed, altered if necessary right at the computer, and then be transmitted back to the Orient so the production lines can gear up.

Electronic Data Interchange allows us to place orders via computer, so orders are received and filled more quickly. We can move goods faster and farther than ever before through distribution centers that use computerized picking and delivery planning. Quick Response systems let us replenish fast-selling merchandise in days instead of weeks so that we have the supply to meet the demand.

In other words, after many years of uncertainty, the industry has finally embraced computer technology and is beginning to save human, financial, and time resources.

But not everyone is eager to accept these technological advances. Many of my suppliers resist smaller and more frequent orders.

In this economy and in tomorrow's, if manufacturers and other suppliers won't adopt such technologies as Quick Response and Electronic Data Interchange, then you can't afford to do business with them. You need them, but they also need you. Their options are very few today, so you have more of an opportunity to tell your suppliers that they have to play your game. Today you are in a position to set ground rules. Ultimately, you answer to the consumer, who has less time to shop these days, and will elect to buy from those retailers who have the stock that customers expect them to carry. The customer will not care that your suppliers will not be your partners in Quick Response.

This is the third in a series of Harris Conversations for the 90s. Other topical roundtables that can help our Harris customers be more competitive will follow.

To receive a longer version of this discussion with Walter F. Loeb, call Harris Bank at (312) 461-5554.

HARRIS BANK

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Future

Continued from page 17

capital. As parents who bought homes in the 1960s and 1970s for $30,000 sell them for up to 10 times that in the 1990s, individualized management, through wrap fees, of estates for their middle-aged children will become increasingly important.

With the economy entering a recession, even large firms face cost constraints that will affect their abilities to meet client demands.

"Trying to manage large sums of money is not easy," said Roger Bransford, national director-asset consulting at TPF&C in Atlanta. The natural evolution of the industry will put a premium on firms that can focus technological product lines and internal organization to exploit specific market opportunities, he said.

Banks and insurance companies will consolidate and, in some areas, look to outside management for their in-house funds, or even sell investment management subsidiaries, according to Dean R. Eberling, an analyst with Shearson Lehman Brothers, New York.

"Banks will be net sellers of their investment management business," he said. "That could emerge as an important source of money for the right firm."

Although insurance companies branched out in the 1980s through acquisitions of money management firms, there are signs that expansion has leveled.

Bill Bethke, president of Prudential Asset Management Co. Inc., Newark, N.J., said that, in the 1980s, anticipated growth levels encouraged those acquisitions, but in the 1990s that won't be the case. "It's now harder to justify paying those high multiples," he said. Although there could be more acquisitions, he said Prudential would pay less.

David Marks, managing director of CIGNA Investments Inc., Hartford, Conn., says he realizes the firm "can't be all things to all people," and thus is focusing on developing broad relationships with a narrower group of clients in areas like private placements in which insurers are strong.

"If we're going to be good at what we're doing, we're going to do it on a full-service basis."

The competition will be sharpened, as always, by sponsor needs, especially a focus on cutting management fees, increasing returns and serving participants who will have greater control over retirement assets.

Vanguard's Mr. Bogle sees an increase in the use of in-house indexed funds. "Why have somebody else manage an index fund?," he thinks is a question plan sponsors increasingly will be asking themselves.

Advisers that specialize in small-capitalization stocks, foreign securities, distressed securities, real estate and alternative strategies will be in demand.

"I see a transition taking place to a broadening of the market," said Mr. Sass. "Investors will be seeking these strategies that can provide high absolute returns without being meaningfully affected by trends in the market."

Plan sponsors also will look to hone their investment objectives through the use of customized benchmarks. "We're all going to be measured by tougher standards," Mr. Bogle said.

Firms able to meet those demands could capture growth expected in new investment avenues, such as international.

"The dominant trend in the next five or 10 years will be foreign securities," Prudential's Mr. Bethke said. "Most pension plans have a long way to go before they reach an adequate level of international investment amounts."

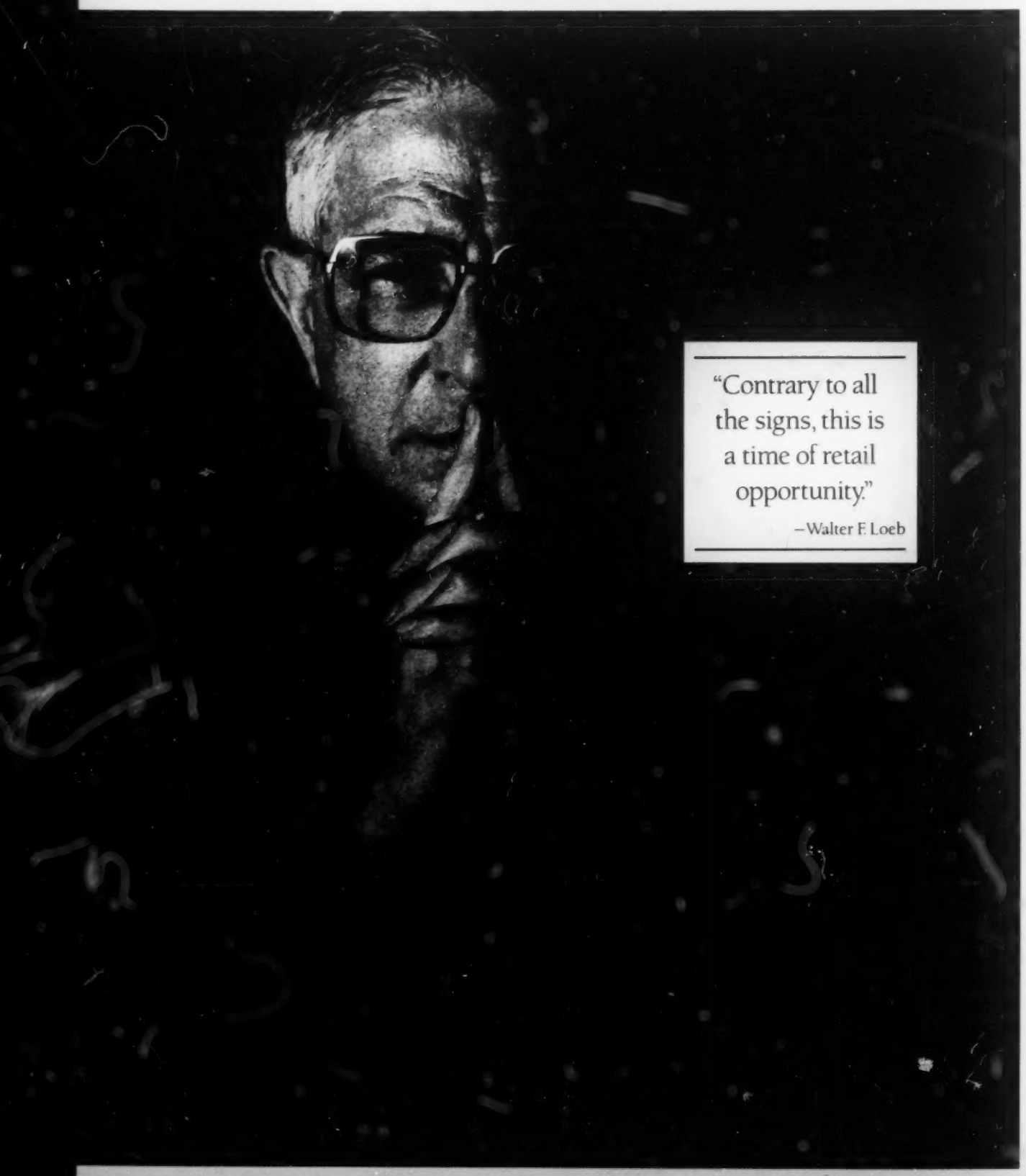
Historically, according to Equitable's Mr. Wruble, investment management growth has come from the channeling of assets away from internal management, but more importantly, from the emergence of new asset classes. "Global investing is the new asset class," he said. "It has built a new industry."

And as that industry develops, it will nourish ancillary growth, he said. Capital needs in Eastern Europe can be met by the huge investment dollars available from U.S. pension funds.

"An industry is being built to make that connection," he said.

Another avenue for growth, although less certain, is law. Banks anticipate an easing of regulatory strictures on their ability to offer mutual funds. In addition, a huge amount of potential investment capital sits with the growing retiree health liabilities, estimated by some to be an initial pool of $400 billion.

Although the government is moving toward requiring sponsors to meet that liability, the at times fickle nature of the political process is by no means certain, Mr. Salisbury said. "To have a business based on hoping the government will create a new market is an ill-conceived approach." ■



"Contrary to all the signs, this is a time of retail opportunity."

—Walter F. Loeb

Foreign

Continued from page 18

ness included Global Fixed Income Advisors, Newark, N.J., $598 million; Pacific Investment Management Co., Newport Beach, Calif., $487 million; Putnam Cos., Boston, $423 million; Payden & Rygel, Los Angeles, $300 million; Brinson Partners Inc., Chicago, $270 million; WorldInvest Ltd., London, $252 million; and Massachusetts Financial Services, Boston, $215 million.

Regional specialization helped buoy smaller firms. HD International, New York, led firms with $250 million to $1 billion under management with $406 million in new business, and about two-thirds of that was for Europe-only portfolios, said Francine Elster, vice president. All of the new assets went to equities.

PCM International, Newark, which finished second in the category with $249 million, all in equities, runs primarily EAFE-mandated, active portfolios. Lombard Odier International Portfolio Management Ltd., London, third with $222 million, had slightly more assets going to Europe-only than EAFE-mandated equity accounts. Lombard Odier had $172 million in new equity business, $50 million in bonds.

For firms with less than $250 million under management, Emerging Markets Management/Emerging Markets Investors Corp., Washington, led with $87 million in new business, all for emerging equity market investments. "There's really a general acceptance that this is a good diversification move," said Josephine Jimenez, portfolio manager. The firm invests client assets in 21 emerging markets and is monitoring other developing markets for possible investment, she said. ■

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Pablo Picasso, 1881-1973

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Growth

Continued from page 18

An even more telling comparison shows that in 1989 each of the top five firms in net new discretionary assets under management picked up at least $1 billion. In 1990 only one firm, Fidelity Investments, Boston, gained at least $1 billion in new business. Fidelity topped the list of net new guaranteed assets under management with $1.32 billion in net new business.

Industry sources believe the guaranteed investment management industry might be maturing, but they do not expect a shakeout among managers as long as defined contribution plans continue to be popular among both employers and employees. More than 60% of assets in participant-directed 401(k) plans flow to GIC/BIC options.

Each of the top five GIC/BIC managers in net business saw their growth rate slashed by at least half. Certus Financial Corp., San Francisco, came the closest to matching its 1989 growth rate by picking up $700 million in new business compared with $1 billion the previous year. The most dramatic decline in growth came at Morley Capital Management Inc., Lake Oswego, Ore., which picked up $456 million in new business in 1990 compared with $2 billion in 1989.

Some of the growth leaders in 1989 declined to respond to the 1990 survey, including T. Rowe Price Guaranteed Asset Advisors, Glen Allen, Va.

"We're seeing the beginning of the maturation of the GIC manager industry," said Kim McCarrel, GIC consultant with Wyatt Asset Services, Portland, Ore.

"Almost everyone is now familiar with the concept of GIC management and most plan sponsors have been called upon. If they were initially inclined to move in that direction, they made the move in 1989 and now it has slowed down in 1990," she said.

But, "We are no where close (to a shakeout). There is enough business to go around. A shakeout occurs when too many competitors are chasing too few clients and we aren't at that point now."

David Perry, president of Certus Financial, said there are essentially three reasons for the slowdown in new business gains by guaranteed investment managers: the uncertainty associated with release of new guidelines by the Department of Labor pertaining to fiduciary responsibility in defined contribution plans, concerns over credit quality in the insurance industry and the Financial Accounting Standards Board's review of book value accounting for guaranteed investment products.

Mr. Perry said managers "continue to add value" to GIC/BIC portfolios and "I think the GIC management community needs to look for innovative alternative ways of providing stable value returns with exceedingly high credit quality instruments from banks, insurance companies or other sources."

Fiduciary Capital Management, Woodbury, Conn., gained $158 million in net new business in 1990 compared with $350 million in 1989.

Peter Bowles, president of Fiduciary Capital, said the decline in new business at the firm primarily is the result of a lag in marketing activities and the loss of three clients. Two of the clients, he said, left for other management firms that offer "one-stop shopping" such as a mutual fund family that can provide investment, record-keeping, trust and administrative services.

"We're still growing at a healthy rate, but inevitably when you have a new asset class and such rapid growth with pent up demand, as the industry matures realistically there will be some losses," said Mr. Bowles.

He said the concerns about insurance company credit quality are "more talk than action" and that credit worries may have had some impact on the drop-off in net new business for guaranteed investment managers but "I don't think we will see a dramatic effect from all that."

"We will and are seeing a heightened sensibility to higher quality and increased sensitivity to outside managers. Among those

See **Growth** *on page 23*

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Growth

Continued from page 22

plans managing (GIC/BIC) assets internally, my perception is that they are increasingly uncomfortable with that responsibility in light of the credit concerns and are increasingly receptive to outside managers and the type of services we provide," he said.

Jason Psome, principal with the GIC consulting firm of Brentwood Asset Advisors, Santa Monica, Calif., said he is not surprised by the drop in new GIC management business and he expects more sponsors to switch from outside managers back to internal management, where most of the $200 billion in GIC assets are now managed.

"Management is at best a shifting of fiduciary responsibilities and administration. Managers don't guarantee a higher rate of return and a higher quality portfolio. Most companies are realizing that management fees on invested assets can be cut down to simply contract placement fees or no fees at all," said Mr. Psome.

"Most plan sponsors probably didn't move to outside managers for investment reasons but for administrative purposes. Those that did move for investment purposes may start to shift back to internal management because they are finding little difference in what they are doing on their own compared with what managers show as performance and charge them 20 to 30 basis points for those invested assets." ■

SCOREBOARD

Most new indexed fund business (net)

($ millions)

Firm	Total	Equity	Fixed Income
State Street Bank	3,088	3,461	——
Wells Fargo Nikko	2,728	2,404	324
Pacific Investment Mgmt.	2,464	123	2,341
Bankers Trust	2,227	1,750	477
ANB Investment Mgmt.	1,800	1,400	400
Western Asset Mgmt.	1,015	0	1,015
Advanced Investment Mgmt.	916	903	13
WR Lazard	535	0	535
Rowe Price-Fleming	374	0	374
INTECH	364	364	0

Money movers is a section that details the appointments of money management firms for tax-exempt funds.

It appears in each issue of *Pensions & Investments*.

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Merits of foreign bonds a subject of debate

By Curtis Vosti and Trudy Ring

As more U.S. pension funds invest in foreign bonds, investment managers and consultants are debating the diversification benefits of this asset class.

Two points of view have come in reports from J.P. Morgan Securities Inc., New York, and Ennis, Knupp & Associates, Chicago. These reports and others have become the source of discussion about the merits of international bonds as a separate asset class.

Morgan's recent "Foreign Bonds in Diversified Portfolios: A Significant Advantage," is a critique of Ennis, Knupp's earlier report, "Foreign Bonds in Diversified Portfolios: A Limited Advantage."

The Ennis, Knupp piece — written by Paul Burik, director of international research, and Richard Ennis, principal — argues the risks and returns to be expected from foreign bonds raise serious questions about whether they should be given a specific allocation in pension portfolios.

"U.S. investors who bear foreign exchange risk do not appear to be rewarded constantly, unless they can anticipate fluctuations in foreign exchange rates more skillfully than most," the report said.

Using mean-variance analysis and long-term return assumptions for 11 asset classes, and returns between 1978 and 1987, Messrs. Burik and Ennis constructed an efficient frontier for each asset class. An efficient frontier shows the maximum return expected for a given level of risk.

The men then removed foreign bonds from the frontier and found the investor loses no more than four basis points a year. They reason the modest cost of excluding foreign bonds from a portfolio could be the result of the high correlation between foreign bonds and U.S. bonds (after hedging out currency fluctuations) and the greater expense incurred — mostly through currency hedging — in passively investing in foreign bonds.

Foreign bonds do provide a diversification advantage, but not as great as that of foreign stocks, Mr. Burik said. Larger pension funds are more likely to gain from any diversification advantage, as for them, a few basis points of return can mean millions of dollars.

Peter Rapaport, a consultant to the bond index group at J.P. Morgan Securities, however, argues that the methodology used by Messrs. Burik and Ennis uses an artificially high allocation of cash and thus skews the results.

In the efficient frontiers constructed by the men, cash makes up nearly half of the portfolio; Mr. Rapaport noted that *Pensions & Investments*' most recent survey of pension finds puts the average cash position at 8.9%. The large cash position used in the Ennis, Knupp study, Mr. Rapaport said, produces portfolios of extremely short duration.

"Cash provides a black hole down which practically any asset class can be made to disappear," he said. "Indeed, if one takes at face value the results presented . . . the question they motivate is not 'Why foreign bonds?' but 'Why long-term assets?' "

Added Victor Filatov, head of J.P. Morgan's bond index group: "The portfolio configuration that (Messrs. Burik and Ennis) generated was highly unrealistic. Once you make (portfolios) representative of the real world, the value of foreign bonds increases significantly."

Mr. Rapaport said his analysis "makes an unequivocal case for a permanent allocation to foreign bonds, regardless of management style."

Mr. Burik said the Morgan criticism comes from a different perspective: It looks at foreign bonds on an equal footing with other asset classes and ignores the fact that most U.S. plans go into foreign bonds after they've invested in the other asset classes. His methodology, he said, was designed to look at foreign bonds' incremental value to an overall portfolio.

"We wanted to look at the problem from the plan sponsor's perspective," Mr. Burik said. "Diversification and the benefits of foreign bonds would be reduced quite a bit if you are looking at it from the perspective of a well-diversified portfolio to start with," he said.

Plan sponsors, he added, invest in long-term assets because they have long-term liabilities. His study, he said, was designed to look at foreign bonds in an unconstrained environment, independent of liabilities.

Mr. Filatov also contended the historical data used by Messrs. Burik and Ennis likely won't be representative of future trends. Bond markets worldwide are becoming more liquid and have a wider variety of derivative instruments available than in the past, he said.

Mr. Burik responded it's not clear what impact these changes will have on the attractiveness of foreign bonds as an asset class. What would make foreign bonds more attractive, he said, would be for countries that have hefty withholding taxes on bond income to rescind or reduce them. Switzerland, for example, has a 35% tax; Spain's is 25% and Japan's is 10%, he said. Some countries, including Germany, Canada and the Netherlands, have no withholding tax, he added.

While discussion continues on the merits of using foreign bonds as a separate asset class, more people are investing in these instruments.

"The basic issue I think comes down to if you're dealing with the total portfolio," says Bob Sinche, vice president of Alliance Capital Management Ltd., New York.

"It becomes the old statistic problem: What do you put in first and what do you put in last?" he said.

He said there is some intuitive logic to the Ennis, Knupp approach. Alliance and other active managers understandably say that, whichever argument is correct, active management of fixed-income funds can add value.

Fixed income does have value, he said: Alliance uses annual data back to 1973 and says it shows that the relations between domestic and foreign bonds have a lower correlation than the relations between U.S. and foreign stocks.

"Foreign bonds would be a better diversification tool," he said.

"It's also significant there's no doubt there is a growing interest and confidence level with foreign bonds" among U.S. plan sponsors.

Ann Kale, director of marketing and research for Global Fixed Income Advisors, Newark, N.J., said pension funds are finding that the strongest reasons to go into global bonds is to enlarge the "opportunity set."

"You want to be able to come back to the U.S. market," she said.

Les Nanberg, senior vice president of Massachusetts Financial Services Inc., Boston, said the real advantage of international bonds that is not addressed in the Morgan and Ennis, Knupp studies is the opportunity offered through active management of foreign bonds.

"As world markets get bigger and more liquid there are more choices, more opportunities." Those opportunities, he said, are increased when, like in recent years, there's been wide fluctuations of the value of the dollar in relations to other currencies. ■

Overseas

Continued from page 2

ing up some key bond markets this year. Although that development would lower interest rates, at least some analysts expect many foreign bond market yields would continue to exceed those in the United States.

"We think global bonds will do well in 1991," said Morris W. Offit, chief executive of OFFITBANK, New York. Not only are the yield levels of many foreign bond markets relatively attractive, but also, by being above those in the United States, they help "cushion" the ravages of a rising dollar, he said.

Some money managers are capitalizing on these good times. Some hope if they can at least gain permission to include foreign bonds opportunistically in domestic portfolios, or "garnish" the portfolios, clients will ease into non-dollar bond investing.

A variety of reasons has prompted Scudder, Stevens & Clark, New York, to encourage more use of foreign bonds in domestic portfolios, said Lynn Birdsong, managing director in charge of fixed-income investments. While Scudder has employed the garnishing technique on a limited basis for about 20 years, about 18 months ago the firm began trying to encourage participation by asking all appropriate institutional clients for permission to include foreign bonds in their domestic bond portfolios when deemed valuable to performance.

Scudder at first sought permission to include up to 10% of portfolio assets in foreign bonds; last year, it expanded that request to a 20% cap. According to Mr. Birdsong, all clients approached so far — about 20 — agreed to Scudder's proposal. No data were available on last year's performance results on these portfolios. Mr. Birdsong said, however, Scudder's domestic bond portfolios that included foreign bonds "meaningfully" outperformed U.S.-only portfolios.

The Pennsylvania state fund allows one domestic bond manager — Miller, Anderson & Sherrerd, West Conshohocken, Pa. — to include up to 20% in foreign bonds in a $1.2 billion bond portfolio, said David Burnett, administrator-investment office. *P&I* was unable to obtain comparative performance data on this account.

Jay Burden, manager of fixed-income investments at the $4.2 billion defined benefit fund of Allied-Signal Inc., Morristown, N.J., said the fund for the past four or five years has allowed one of its managers — J.P. Morgan Investment Management Inc., New York — to include international bonds in a $480 million bond portfolio. While the fund has been "satisfied with this account's returns, we haven't found" the foreign bond component — which has never been above 7% of the portfolio's assets — "to have been significantly large enough to alter (performance) one way or another," he said.

One pension fund executive, who asked to not be identified, said, however, his fund established a separate account rather than include foreign bonds in domestic portfolios because that way the fund is assured of maintaining a global bond allocation.

"By incrementally adding global/international bonds to fixed-income holdings, you can dampen volatility and reduce risk while enhancing performance because (there is not) a tight correlation between U.S. and non-U.S. bond performance. The U.S. market doesn't finish in first place every year. Why limit yourself to one country's fixed-income market?" the executive said.

The $90 million endowment of the Brookings Institution, Washington, has been investing about $15 million in global bonds with OFFITBANK for three to four years, said Ezra K. Zilkha, Brookings' investment committee chairman. Diversification and superior-to-U.S.-returns, were the incentives. And indeed, the endowment has found that "over time, OFFITBANK has done better in performance than domestic bond indexes," said Mr. Zilkha, who did not provide supporting data.

Looking ahead, Marvin D. Winston, cash management manager at the approximately $400 million Memphis Light, Gas and Water Retirement and Pension System, is among those considering such investments. Mr. Winston said he will decide in February or March whether to recommend international bonds to fund trustees. The fund already invests in international equities. Mr. Winston's decision on foreign bonds will hinge on three key investment issues: safety, yield levels and liquidity. "If we can find some foreign government" and perhaps quasi-government "bonds with a nice rate of return, and that are fairly liquid, it may be a good place to be," he said. ■

University system exec appointed

COLUMBIA, Mo. — Shirley Shea DeJarnette has been appointed assistant vice president for investment and banking at the University of Missouri System.

In her new post, Ms. DeJarnette will oversee the university's $600 million pension fund and its $140 million endowment fund. The assets are managed by outside managers.

She said one of her first goals is to get the university to find a consultant for the endowment fund.

Most recently, Ms. DeJarnette was the managerial director of DeJarnette Investment Advisors, Charlottesville, Va. She is replacing University Treasurer Donald S. Holm Jr., who is retiring. ■

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Indexing

Continued from page 2

page in total indexed assets probably is explained by the popularity of international indexing and the instability in the domestic equity market; domestic equity funds account for more than half of all the managers' indexed assets.

"The growth in the international area is the big story for 1990," said Patricia Dunn, chief investment officer at Wells Fargo Nikko Investment Advisors, San Francisco. "A lot of U.S. pension funds followed through with plans to diversify outside the U.S.; our assets reflect that trend."

Wells Fargo's total indexed assets increased to $82.8 billion from $77.15 billion at May 31 and the firm is, by far, the largest U.S. domestic index fund manager. Almost half of those assets, $46 billion, are in domestic equity funds, but international equity indexed assets were Wells' biggest growth area, in this survey, climbing 78.6% to $7.5 billion Dec. 1 from $4.2 billion May 31.

Acknowledging the poor performance in the international equity markets, largely because of the dramatic decline in Japan, Ms. Dunn said she views such declines as buying opportunities and remains positive on international equities.

"On the domestic (equity) side, we see some flux. In our asset allocation accounts we have disfavored equities. Another trend other managers may have noticed is that a lot of corporate pension funds are in a negative cash flow position for the first time in several years and are drawing down (assets). Some of that is reflected in a decline in equities," she said.

"The main reason for the decline (in equities) is that most pension funds were fully or over exposed to their equity targets in 1990. They went into 1990 overexposed and used index funds to adjust that exposure."

Indexing is still looked upon as a low-cost, reduced-risk alternative to active management and is likely to continue growing in importance among pension plan sponsors, said Greg Buckalew, consultant with Wyatt Asset Services, Atlanta.

"What we see happening in the market is that 1990 turned into another year when the S&P outperformed specific-style managers, and we now think we see some shifting to index funds as core positions with stylized managers used to get the extra kick," he said.

Mr. Buckalew said indexing is likely to continue its growth at the expense of active managers because "managed money, net of fees, has a hard time beating the indexes and if it does, it probably won't beat it by much."

Dennis Tritin, consultant with Frank Russell Co., Tacoma, Wash., said much of the growth in indexing is through the use of customized indexes designed to meet client objectives.

"We're finding there are a broader number of alternatives, and clients are constructing custom indexes. Some, for example, are keyed off the Russell 1000 in which clients are constructing growth and value indexes which give them an exposure to style using an index. It takes the active/passive decision to a style level," said Mr. Tritin.

John Meneghetti, vice president and manager of quantitative services at NCNB-Texas, said any decline in equity indexes during the second half of 1990 is attributable to market activity. NCNB-Texas' indexed equity assets declined to $675 million Dec. 1 from $740 million May 31. Adjusted for the market, that represents an increase of less than 1%.

"This year we heard so much about the demise of index funds and the benefits of active management because active managers held some cash. It is clear that active managers had a difficult year, even with cash," he said.

Mr. Meneghetti said indexing will remain popular "because of the predictability of relative performance relative to a benchmark. We have found among our large plan sponsors that they don't want to have to explain to participants why a fund did well or worse than the market. They like to be close to the market either way, good or bad."

Mr. Meneghetti also said the trend is toward specialized or customized indexes.

"We're seeing some more sophisticated plan sponsors realizing they may be in an equity environment where returns won't be what they have been in the past, the 14% to 15% range. Their approach to enhance returns won't be to add active managers but some derivative or enhanced index funds using tilts or other approaches and enhancements."

Mr. Buckalew said most of the increase in fixed-income assets is due to market appreciation and plan sponsors are not flocking to fixed-income index funds.

"In generic bond index management we haven't seen a lot of interest or activity," he said. "Most of the shifting (from equities) in a nervous market doesn't tend to go to traditional fixed-income markets but into cash because people believe they won't be able to shift that money out and move back into equities." ■

Leading index fund managers
($ millions)

Company	Total	Domestic equity	Domestic fixed	Int'l equity	Int'l fixed
Wells Fargo	82,793	46,000	29,000	7,505	288
Bankers Trust	41,934	31,282	8,702	1,750	200
Mellon Capital	28,370	23,690	4,230	450	0
State Street	26,762	16,224	2,279	8,094	165
ANB	11,607	9,436	1,724	447	0
Alliance**	7,461	6,831	20	610	0
Panagora	7,278	4,517	1,586	775	400
GE Investment*	5,643	5,643	0	0	0
Mellon Bond	5,200	0	5,200	0	0
Dimensional Fund	4,691	2,900	791	1,000	0
Lincoln Capital	4,400	0	4,400	0	0
Manufacturer's Nat'l/Detroit	4,145	4,101	40	4	0
Pacific Investment	4,090	890	3,200	0	0
Wilshire	3,667	3,667	0	0	0
Vanguard	3,489	3,124	244	121	0
Chase**	3,380	1,800	480	1,100	0
Prudential Fixed Income	1,443	0	1,443	0	0
PDI	1,440	1,248	0	192	0
Northern Trust	1,434	1,151	283	0	0
T. Rowe Price	1,427	263	1,164	0	0
Putnam	1,324	0	1,324	0	0
BEA***	1,300	0	1,300	0	0
Travelers	1,290	812	194	256	28
Advanced Investment	1,200	1,200	0	0	0
Security Capital	1,135	0	1,003	0	132
First Wisconsin	1,085	95	990	0	0
Sears****	997	932	0	65	0
Chancellor Capital**	990	968	0	22	0
Mitchell Hutchins*	920	255	665	0	0
WR Lazard	903	0	903	0	0
Axe-Core	890	550	0	340	0
Aetna Life	849	490	359	0	0
Lehman Ark	792	0	792	0	0
Boston Int'l	761	0	0	761	0
Nikko Capital	729	500	0	229	0
Ryan Labs	710	0	710	0	0
NCNB-Texas	675	675	0	0	0
ASB Capital	584	584	0	0	0
Fidelity Investments	506	480	26	0	0
Capstone	500	500	0	0	0
Boatmen's	495	480	15	0	0
Atlantic Portfolio	468	0	468	0	0
Harris Trust	420	420	0	0	0
Bear, Stearns	320	0	320	0	0
Old Kent Bank	319	319	0	0	0
Todd Investment	274	0	274	0	0
Associated Capital	250	179	71	0	0
NBD Bancorp	239	239	0	0	0
Monitor Capital	216	112	63	41	0
Metropolitan Life	169	169	0	0	0
Total	**271,984**	**172,728**	**74,283**	**23,762**	**1,213**

*As of May 31 ***As of Sept. 30
**As of Dec. 31 ****As of Jan. 23

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Gains

Continued from page 1

Atkins said.

Bankers Trust is an example of managers dominating the industry that benefited from the broad array of products they offer. Investment products that have shown substantial appeal during the past year include those in the international or global arenas; the defined contribution sector; and the passive or quantitative approaches, said Roger C. Bransford, national director-asset consulting, with TPF&C, Atlanta.

"The product is very good, but probably more important than the product being good, it's aimed at market segments that are very anxious to buy," Mr. Bransford said generally speaking.

While both are leaders in indexing and international, State Street brought in the most new equity business — $2.4 billion — and Bankers Trust brought in the most new balanced account business — $618 million, mostly managed according to tactical allocation strategies.

"We still see some activity in balanced and some fine retooling of the equity side," said Philip Schneider, consultant with the The Wyatt Co., Chicago. "There's a group of midsize companies . . . (that) prefer the balanced approach as opposed to the specialty managers."

J.P. Morgan Investment Management Inc., New York, brought in the most new fixed-income business, with $2.3 billion in new assets, followed by Pacific Investment Management Co. with $1.9 billion and Metropolitan Life Insurance Co., New York, with $1.7 billion.

(J.P. Morgan's data were not available in time to be included in the charts that start on page 17.)

The continued growth in defined contribution assets cemented Boston-based Fidelity Investments' spot at No. 3 overall with $2.9 billion in new business. The Vanguard Group of Investment Cos., Valley Forge, Pa., corralled $2.04 billion in new business, of which 80% could be linked to the growth in defined contribution assets.

At Vanguard, 40% of all the new assets invested on behalf of defined contribution plans went into "safe" vehicles such as Treasury securities and money market funds, and 35% were invested in equities, primarily Standard & Poor's 500 Stock Index funds, said Jim Gately, senior vice presi-

See **Gains** *on page 31*

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AT DEADLINE

PBGC deficit increases 80%

The Pension Benefit Guaranty Corp.'s deficit soared 80% to $1.8 billion during the year ended Sept. 30.

The change reflects both investment losses and liabilities incurred from the termination of underfunded pension plans.

Just a year ago, the agency reported its 1989 deficit had shrunk by one-third, to $1 billion from $1.5 billion a year earlier.

Massachusetts post filled

Steven J. Kaseta has replaced Richard Kelly as deputy treasurer of Massachusetts.

As part of his responsibilities, Mr. Kaseta will be in charge of the Massachusetts Employees' & Teachers' Retirement System.

Mr. Kaseta formerly was a bond trader with UBS Securities. Mr. Kelly has taken another position in the treasurer's office.

Funds announce shifts

The $425 million Jacksonville (Fla.) General Employees' Pension Fund hired First Union National Bank, Charlotte, N.C., as custodian. The previous custodian was Florida National Bank, Jacksonville, which was acquired by First Union.

The Metropolitan Museum of Art, New York, has hired The Vanguard Group of Investment Cos. to manage its $5 million defined contribution plan for non-union employees, replacing Aetna Life and Casualty.

SEC ruling due

The Securities and Exchange Commission will take up Wunsch Auction System Inc.'s application to operate an electronic single-price auction market at its Feb. 20 meeting. Five U.S. stock exchanges and the NASD oppose the application.

INSIDE

Illustration by Ted Fuks

Investors gain access

A sense of cooperation and compromise is beginning to permeate the proxy voting process, replacing management's traditional exclusionary attitude toward shareholders. In Commentary, Page 15.

Dow Chemical, a plant of which is shown above, is resisting a proposal on independent directors.

Fighting for independence

Proxy proposals seek directors without company ties

By Hillary Durgin

Institutional shareholders have filed proxy resolutions with eight companies demanding a majority of directors be independent of management.

The resolutions, resisted by at least four of the companies, have catapulted insider boards of directors to the top of the corporate governance agenda.

The companies targeted by the activist institutional investors are: Dillard Department Stores Inc., Little Rock, Ark.; Dow Chemical Co., Midland, Mich.; Tribune Co., Chicago; Waste Management Inc., Oak Brook, Ill.; Charming Shoppes Inc., Bensalem, Pa.; Intergraph Corp., Huntsville, Ala.; National Semiconductor Corp., Santa Clara, Calif.; and Occidental Petroleum Corp., Los Angeles.

The four companies resisting the proposals so far are Dillard, Dow, the Tribune and Waste Management. All four have appealed to the Securities and Exchange Commission to have the proposals omitted from their proxy statements.

The resolutions were put forth

See **Proxies** *on page 38*

Cash execs scrutinize FDIC fees

By Fred Williams

Skyrocketing premiums assessed by the FDIC to recapitalize the dwindling Bank Insurance Fund are prompting cash managers to monitor bank fees more carefully.

The National Corporate Cash Management Association is urging treasury managers to examine how their banks assess FDIC-related charges and to check for new charges in their monthly statements. Corporations that use compensating balances to pay for bank services are expected to be harder hit than those that pay cash.

Cash managers contacted by *Pensions & Investments* said assessments for FDIC premiums from their banks have not been a significant item in the past but they expect to monitor the charges as premiums increase.

The fees "obviously will be a concern as (banks) start charging more," said Vicky Roberts, assistant treasurer at Centex Corp., Dallas. "As it becomes a more costly part of our business, it will become more of a concern."

Funding deficits suffered by the Bank Insurance Fund, used to bail out failed or troubled banks, are but a symptom of the problems plaguing the banking industry that are starting to affect banking relationships among large corporate clients. Already, 40 of 100 treasurers of Fortune 500 companies interviewed by Prudential-

See **FDIC** *on page 37*

Catholic orders face retirement shortfall

By Joel Chernoff

Aging priests and nuns face a bleak future, as an impending financial crisis threatens the ability to pay for their retirement needs in more than one-third of the nation's 1,000 Catholic religious communities.

Beset with radically changing demographics, lack of retirement savings and inflationary pressures, retirement-income needs are expected to peak during the next few years.

"It's going to hit some communities so fast and so hard, they will be reeling in three or four years," said Sister M. Oliver Hudon, director of the Tri-Conference Retirement Office, Washington, created by national organizations representing priests, nuns and bishops to aid local communities.

While fund-raising appeals and efforts to control costs have increased, liabilities among U.S. religious communities have grown much faster: The most recent data show a past service unfunded liability totaling $3.9 billion, assuming all cash, investments and properties were available. If properties and facilities owned by the orders and dioceses are excluded from consideration, that unfunded liability jumps to nearly $5.6 billion, according to a recent survey by Arthur Andersen & Co., Milwaukee.

In fact, the survey found 37% of the religious communities had less than 10% of the money needed to fund their retirement needs from cash and investments in 1989, while 82% had less than 50%.

As the number of men and women entering religious life

See **Catholic** *on page 37*

The swelling ranks of elderly Catholic nuns and priests are creating a financial morass for the religious orders.

NEWS DIGEST

Photo by Mary Herleby

A major investor of Federated Department Stores Inc., which owns Bloomingdale's, was cleared to sit on the bondholders' panel and trade securities of the company. Page 37.

SPECIAL REPORT: PIPER

A domestic stock rally in the fourth quarter softened the impact of last year's stock market drop, but the average portfolio still posted negative results. Page 19.

A small closed-end fund concentrating on regional malls outscored all other commingled real estate funds for the year ended Sept. 30. Page 19.

FINANCING

Eight companies are the subject of proxy resolutions filed by institutional shareholders demanding a majority of directors be independent of management. Page 1.

A little-known upstart engineering construction firm is the first U.S. company to issue equity domestically under the SEC's Rule 144A. Page 3.

INTERNATIONAL

MMG Patricof Group raises $400 million in what is believed to be the largest international venture capital fund ever. Page 2.

Investors are being cautioned by a Salomon Brothers executive to be wary of some foreign office markets because of overbuilding. Page 32.

REAL ESTATE

The California Public Employees' Retirement System has established a second close relationship with a real estate developer. Page 3.

Impending commercial bank problems might send more shock waves through the institutional real estate market, a report says. Page 31.

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Money manager survey mailed

Questionnaires for *Pensions & Investments'* annual survey of the largest institutional investment management firms are in the mail. In order for your firm to be included in the May 20 special issue, completed forms must be returned by Feb. 25. If you have not yet received a questionnaire and wish to receive one, contact Christine Philip, directory coordinator, at (312) 649-5217.

Hineman out at Texas fund

Teachers' board reinstates Reischman to realty post

By Fred Williams

AUSTIN, Texas — Bruce Hineman, the executive secretary of the $23 billion Teacher Retirement System of Texas who sacked two senior system executives in the past three months, has himself been placed on administrative leave until his retirement June 30.

Ronald Douglas, deputy executive secretary, has been named acting executive secretary until a replacement is named.

Mr. Douglas said he has rehired one of the two executives forced out by Mr. Hineman. He said Owen A. Reischman, investment officer-real estate, was reinstated to his position effective immediately. Mr. Reischman was relieved of his duties by Mr. Hineman and placed on administrative leave Jan. 28. Mr. Reischman maintained he was fired by Mr. Hineman (*Pensions & Investments*, Feb. 2).

Mr. Douglas declined to comment on the circumstances surrounding Mr. Hineman's departure, saying only Mr. Hineman requested to be placed on administrative leave following a Feb. 11 meeting of the board.

Mr. Hineman, contacted at his home in Austin, said he left by his own choice. "In our discussions (with board members), it evolved to that."

He declined to answer specific questions about his departure or his actions regarding Mr. Reischman and former chief investment officer Joe Perrone, who was terminated in December.

"I feel very relieved; I just tried to do my job the best that I could," he said. Mr. Hineman said he is in the process of establishing an office in Austin for the National Council on Teacher Retirement, where he will serve as executive director.

Ed Wicker, chairman of the system's board of trustees, said Mr. Perrone will be discussed at the next meeting of the board, slated for the first week in March.

Mr. Douglas would not comment on whether the system would seek to reinstate Mr. Perrone. Mr. Perrone said he has had no contact with the board.

The system has hired two executive search firms to find replacements for Messrs. Perrone and Hineman. ■

The Texas Teachers' board has placed Bruce Hineman on administrative leave.

Venture fund hits $400 million

By Marlene Givant Star

NEW YORK — In what is believed to be the largest international venture capital fund ever, MMG Patricof Group has raised $400 million from institutional investors.

Among the investors are the pension funds of AT&T Corp.; the Pennsylvania State Employes' Retirement System; the California Public Employees' Retirement System; and The Massachusetts Pension Reserves Investment Management Board.

British pension fund investors included British Telecommunications; the Post Office Staff Superannuation Scheme; South Yorkshire Pensions Authority; Greater Manchester County Superannuation Fund; Vauxhall & Associated Cos. Common Investment Fund; the Merseyside Superannuation Fund; the West Midlands Metropolitan Authorities Superannuation Fund; and Guardian Royal Exchange. A Canadian fund, the Hospitals of Ontario pension fund, also invested.

The fund also attracted Allstate Insurance Co. and The Equitable Life Assurance Society of the United States.

The commitments, a significant amount from U.S. investors, are all the more extraordinary given the doldrums in the venture capital industry this year. According to Venture Economics, Needham, Mass., only $1.8 billion in new capital was committed to independent private venture capital firms in 1990, compared with $2.4 billion the previous year and a peak of $4.2 billion in 1987. The figure is the lowest since 1982.

The fact that international institutional investors, a large number of which are American, have made this commitment to find the most promising European opportunities of the 1990s is a clear indication that the globalization of the investment community will continue and increase," an MMG Patricof statement said.

The fund, APA European Ventures, consists of three separate country funds. A subsequent and final closing is scheduled for March 31 and may result in an increase in the final amount raised.

The fund will invest in start-ups, early stage growth companies and turnaround investment situations in five countries. Its APA German European Ventures will be the group's first in Germany and, unlike the others, will not limit its investments to domestic companies. It will consider companies in Austria and Switzerland as well.

In addition to capital, MMG Patricof plans to contribute managerial and strategic guidance to its portfolio companies.

Including this fund, MMG Patricof manages $1.5 billion in institutional assets worldwide, of which $1 billion is in Europe.

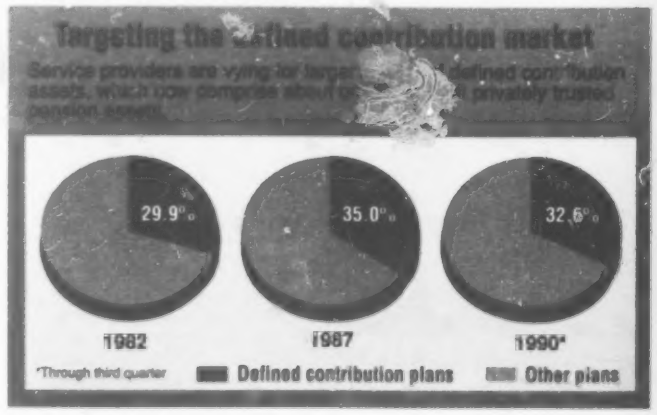
Record keepers fight for clients

By Curtis Vosti

Record-keeping firms are scrambling to attract defined contribution plan clients.

In the past few years, mutual fund institutions have made great inroads on the business dominated since the 1982 advent of 401(k) plans by banks, insurance companies and benefits consulting firms.

Frank Russell Co. has now joined the fray, offering what it calls "one-stop shopping" to defined contribution plans. As mutual fund companies have done, Frank Russell is selling record-keeping services as an enticement to the firm's mutual fund offerings, with the communication advantages of daily valuations offered on the phone to participants and existing organizational structures that can transfer easily to participant record keeping.



But the traditional leaders are not about to give up on the growing market, estimated to be more than $400 billion.

Recently, State Street Bank & Trust Co., Boston, landed trustee-

See **Scramble** *on page 38*

Denver Investment Advisors, Inc.

633 Seventeenth Street; Suite 1800
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Denver, Colorado 80217

Dennis E. Larkin
Vice President
(303) 293-5588

Equity ■ Balanced ■ Fixed Portfolios

Indexers play it cool on change in S&P

By Trudy Ring

Wary of price distortions, not all stock index fund managers rushed to sell Carter Hawley Hale Stores Inc. shares when the company left the Standard & Poor's 500 Stock Index because of its Chapter 11 filing.

Several were concerned that selling Carter Hawley Hale immediately upon its deletion from the index — at the close of trading Feb. 12 — and simultaneously buying its replacement, Boatmen's Bancshares Inc., would result in selling low and buying high. Carter Hawley Hale closed trading that day at 8, down half a point from the previous day's close, while Boatmen's closed at 38⅜, up 3¼.

Some managers, however, made the transactions immediately to maintain exact tracking of the index. A few didn't have to deal with it at all, because they buy a sample of the index rather than all 500 stocks and didn't hold any Carter Hawley Hale. Bankruptcy screens, not universally used by indexers, didn't consistently predict the retailer's fall.

At Chancellor Capital Management, New York, the bankruptcy screens didn't catch Carter Hawley Hale before the filing, said Jeremy Lefkowitz, managing director. He noted, however, Pan Am Corp., the last S&P 500 company to make a bankruptcy filing before Carter Hawley Hale, had been screened out by the time it filed. Chancellor handles about $1 billion in S&P 500 funds.

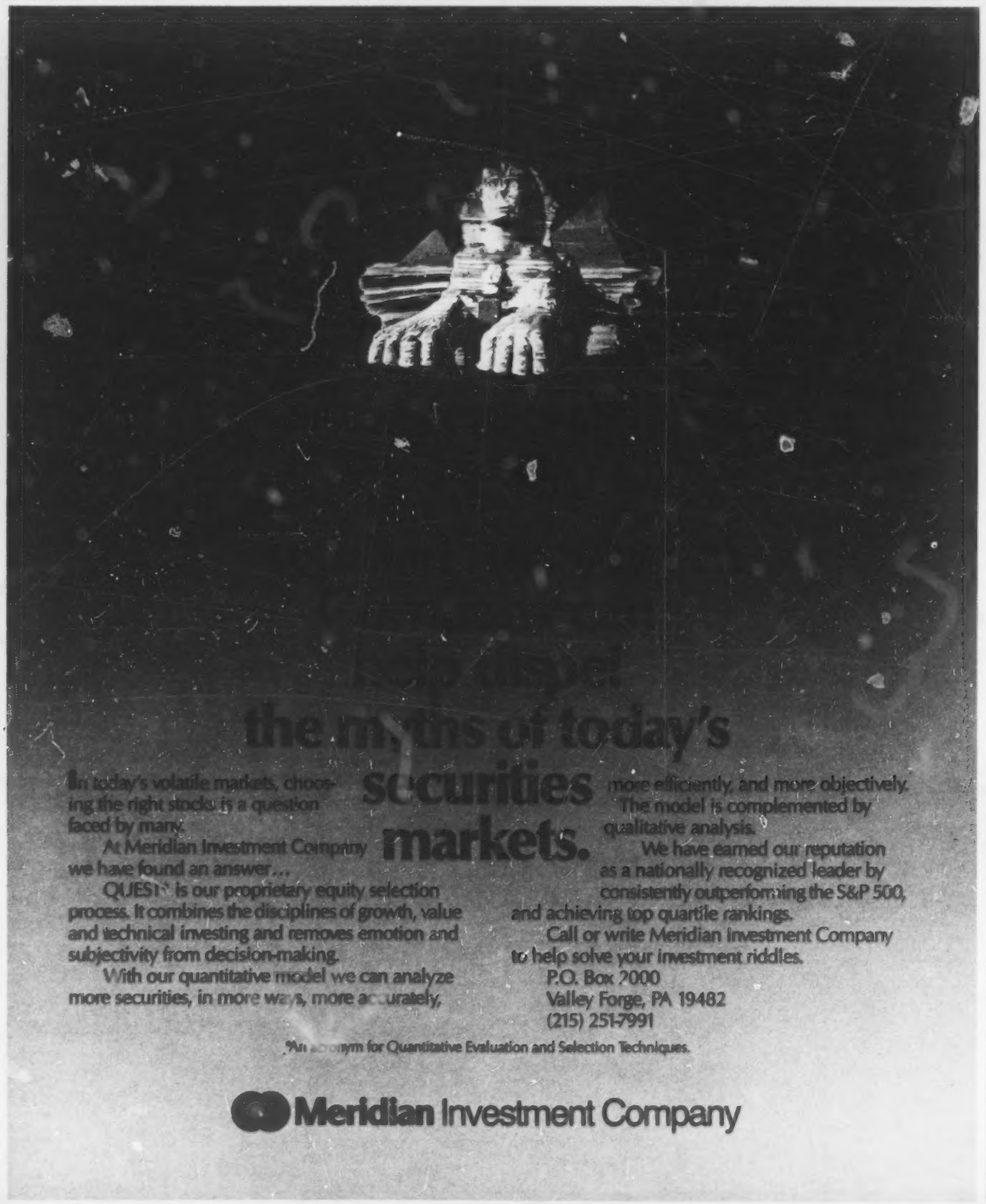
ANB Investment Management Co., Chicago, spread its selling and buying over a few days. "You have the rush of emotion where everybody runs out to sell the stock," said Paul Daley, investment officer. ANB used a futures hedge to avoid tracking error, he said. ANB runs about $6 billion tracking the S&P 500.

PanAgora Asset Management, Boston, sold Carter Hawley Hale and bought Boatmen's as soon as the index changed. Tony Ryan, manager-domestic equities, acknowledged there's debate about such moves, but said PanAgora seeks to track the index exactly, holding all 500 stocks in their capitalization weights and buying or selling them at the price at which they go in or out of the index. PanAgora manages about $1 billion in S&P 500 funds.

The $59 billion California Public Employees' Retirement System, Sacramento, gradually was disposing of the Carter Hawley Hale stock from its S&P 500 fund, and may end up holding some of the stock in its market completion fund, said DeWitt Bowman, chief investment officer.

"We're not strict indexers in the sense that we have to do something exactly when the index does," he said.

Both funds are managed internally and have combined assets of $16 billion. ■



CORRECTIONS & CLARIFICATIONS

- **Robert Garvy** was head of marketing at Wilshire asset management services. His title was misreported in a Jan. 21 article.
- **Pacific Investment Management Co.** took in $2.549 billion in new business during the year ended Nov. 30 and a total of $208 million in new indexed fund business. The numbers were misstated in the Feb. 4 issue.
- **Bankers Trust Co. — Investment Management Group** was listed in the wrong section of the Feb. 4 Scoreboard chart showing top gains in new GIC business. The investment management group is a portfolio manager, not issuer, of guaranteed products.

Real estate investment criteria by property type

Fourth quarter 1990*

Property type	Industrial	Retail: Regional centers	Retail: Community/ neighborhood/ power centers	Office: C&D	Office: Suburban	Apartment
Pre-tax yield (IRR)						
Range**	11-13%	10.5-11.5%	11-12.5%	11-12.5%	12-14%	11-14%
Average	11.7	11.3	11.8	11.6	12.7	12.3
Going-in cap rate	9.0	6.6	8.9	8.0	9.6	8.4
Terminal cap rate	9.3	7.3	9.2	8.5	9.8	8.8

* This survey was conducted in December 1990 and reflects desired returns for fourth quarter 1990 investments.
**Ranges and other data reflect the central tendencies of respondents; high and low responses have generally been eliminated.
Source: Real Estate Research Corp., Chicago

Graphic by Cynthia Watson

REAL ESTATE

Investors putting cash at the top of their deal lists

■ It seems, in the real estate community, that cash indeed is king.

Chicago-based Real Estate Research Corp.'s "Real Estate Investment Survey: Fourth Quarter 1990" indicated a growing tendency among investors to focus on cash-on-cash returns as the primary deal criterion.

Yield expectations continued to climb, with current yield expectations for all property types ranging from 10.5% to 14%. The average yield expectations ranged from 11.3% to 12.7%.

The spread between historical returns from other investment vehicles and the expected yield from real estate remained greater than two percentage points. The trick, however, is to be able to buy low and endure depressed income streams while waiting for improved market conditions, the report states.

The survey also noted the continued, and well-deserved, decline in popularity of office buildings. Offices were preferred by only 7% of the respondents.

Retail and apartment buildings were the most-favored property types, each the preference of 33% of the respondents; industrial sites were preferred by 27%.

In general, the survey found a general sense of optimism for 1991.

Several respondents, for example, said the savings and loan/banking crisis will not be "doomsday deal-killer," but rather a "necessary evil" leading to better investment criteria and a stronger market in the long run.

TERMINATIONS

Reversion issue destined for court

■ The battle between Desoto Inc. and some former employees over a pension surplus apparently is headed for a court showdown in May.

The suit filed in August by four former employees seeks a class-action status and so far has prevented Desoto from terminating its $100 million-plus pension plan.

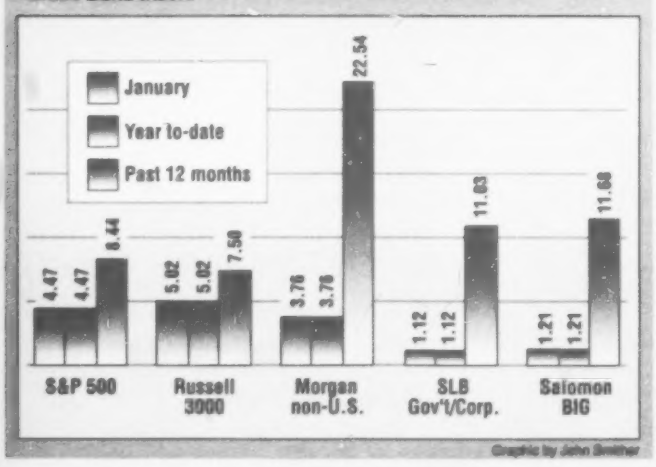
A federal judge in Chicago issued a preliminary injunction against Desoto Dec. 27, preventing it from terminating the plan until the issues of the case are resolved.

The suit alleges the firm laid off 10% of its work force in 1989 and 1990 to reduce liabilities and swell its pension surplus, estimated at $60 million. The suit alleges Desoto planned to terminate the pension fund and distribute the surplus to its shareholders to help fend off a $50-a-share takeover bid from Sutton Holding Corp. That bid eventually was defeated, although Desoto since has sold some of its businesses.

Edna Selan Epstein, attorney for the former employees, said that while she has talked with the company, she is not optimistic a settlement could be reached before the parties return to court in May.

Pensions & Investments' indexes

The P&I monthly indexes track changes in the Standard & Poor's 500, Frank Russell Co.'s Russell 3000 Stock Index, the J.P. Morgan non-U.S. Bond Index, the Shearson Lehman Brothers Government/Corporate Bond Index and the Salomon Brothers Broad Investment Grade Bond Index.



Graphic by John Smither

P. Williams

PEOPLE

New point man on labor panel

■ Pension observers are focusing on Rep. Pat Williams, D-Mont., the new chairman of the House Education and Labor subcommittee on Labor-Management Relations.

Rep. Williams, who succeeds Rep. William L. Clay, D-Mo., will have to decide whether to push for legislation that would protect the pension assets of public retirement systems, a decade-old issue. State and local governments increasingly are turning to pension funds to finance pet projects or balance their budgets.

"It's not just the state and local governments that want to get their hands on your money, it's the feds," Phyllis C. Borzi, pensions counsel to the subcommittee, said at a recent meeting of the National Conference on Public Employee Retirement Systems.

In addition, Ms. Borzi said the Education and Labor Committee might try to block attempts to remove pass-through insurance from bank investments made by pension funds. The Treasury Department and leading congressmen have proposed eliminating the coverage.

INTERNATIONAL

Firm takes subcontracting route

■ Lee, Robinson & Steine Inc., Nashville, has expanded its investment management horizons to include foreign investing. But the firm isn't providing the services.

Lee, Robinson & Steine, which previously only offered domestic stock and bond management, is subcontracting Henderson International Inc., London, to offer management of non-U.S. stocks.

Lee, Robinson & Steine is using a program called Henderson Overseas Portfolio LP. That offering provides clients with individual account management. Henderson International, according to Richard Garland, a Henderson International director and vice president, hopes to develop similar links with other regional U.S. firms.

Lee, Robinson & Steine went the subcontracting route because the firm's executives wanted to offer the service, which the firm itself couldn't provide, because of "a combination of the fact that clients want it and that we felt that over the decade of the 1990s, international investing will become a much bigger field — one in which we wanted our clients to be able to participate," said Charles Robinson, chairman.

BENEFITS

Group taps pollster for 'valid' data

■ The Profit Sharing Council of America wants to add what it calls "valid" information to the debate over the use of lump-sum distributions.

The Chicago-based organization has hired The Gallup Organization Inc. to conduct a national survey of those who received lump-sum distributions in 1990.

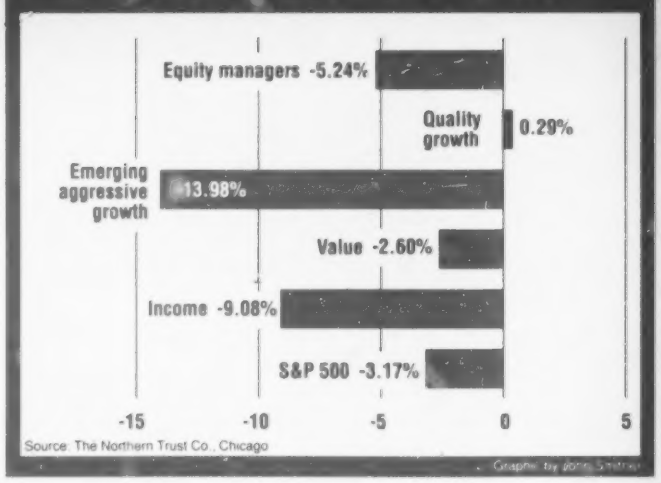
The council says it hopes to produce a "statistically valid" study by summer that could counter moves in Congress to restrict the use of lump-sum distributions. A 1990 Employee Benefit Research Institute study indicated that most of lump-sum distributions had not been rolled over into retirement accounts, prompting government officials to call for restrictions on such distributions.

Council officials say, however, the EBRI study included workers receiving lump-sum distributions before 1986 tax reform, which imposed a penalty on those who did not roll over the assets.

A spokesman for EBRI said while that was true, the trend for those workers who received them after 1986 was about the same.

TNT equity manager universe

Median returns for 12 months ended Dec. 31



Source: The Northern Trust Co., Chicago

Graphic by John Smither

SECURITIES LENDING

Banks make pact on global scale

■ Bank of America's Global Securities Services Group will provide securities lending to its global custody clients through an arrangement with Boston Safe Deposit & Trust Co.'s Securities Management Group.

Bank of America's unit initially will offer its clients the ability to lend Japanese equities and U.S. Treasuries to selected broker/dealers and U.S. regulated commercial banks, according to Lee Harbert, vice president and manager of the group.

Fees generated by the service could enable clients to offset custodial fees, he added.

Boston Safe's Securities Management Group will act as the intermediary for matching the securities of the bank's clients with broker/dealers who need to borrow them for short periods. Boston Safe also will maintain records of the transactions.

New cooperation heading off proxy fights

By Howard D. Sherman

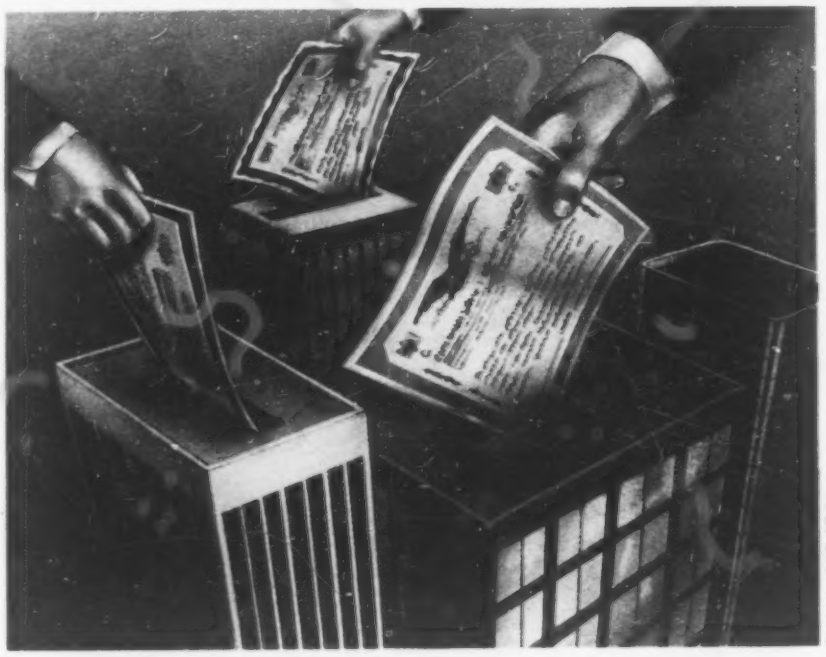


Illustration by Ted Fuka

The traditional pattern of corporate resistance to shareholder proposals is beginning to erode. Instead of always trying to keep them out of proxy material or opposing those put to a vote, corporations now in many cases are compromising with proposal sponsors to find substantive agreement.

This trend started last year with a few compromises (Westinghouse Electric Corp. voluntarily adopting confidential voting after receiving a proposal from the United Shareholders Association; BankAmerica Corp. canceling golden parachutes; and Bear Stearns Cos. agreeing to submit golden parachutes and poison pills to a shareholder vote); and now the trend appears to be building as the new proxy season begins.

So far this year, K mart Corp. agreed to eliminate its poison pill by 1995 unless extended by a shareholder vote, a move in response to a 1990 Wisconsin State Investment Board non-binding proposal that received a majority of shareholder votes. Champion International Corp., a target of numerous proposals in recent years, redeemed its poison pill. General Motors Corp., in response to a proposal from the California Public Employees' Retirement System, agreed to adopted a bylaw provision that would require a majority of GM's board to be independent directors.

Cooperation and communication is manifest in other areas. Dialogue between management and shareholder intermediaries is growing: management consultants like McKinsey & Co., executive compensation planners like Fred Cook & Co., public relations firms like Hill & Knowlton Inc. and proxy solicitation firms like Georgeson & Co., have begun to survey shareholders and their consultants on the likely shareholder responses to restructuring plans, takeover defenses and management compensation packages. The nation's leading activist institutional shareholder, the California Public Employees' system, is talking with the leading corporate coalition, Business Roundtable, about a joint survey of corporate directors.

Why should corporations be more cooperative, especially when they have been so successful in defeating proposals? The reason has to to do with the changed ownership environment of the 1990s.

Shareholders proposing corporate governance initiatives no longer can be dismissed, as they were routinely and often unfairly, as gadflies. Participation has broadened; many institutional investors now devote substantial time and resources to their corporate governance responsibilities and are integrating them into their investment decisions. More institutional investors now include corporate governance items, such as anti-takeover devices, board composition and executive pay policies, in their portfolio screens. The decision to sponsor shareholder initiatives and how to respond to them are an increasingly important aspect of portfolio management.

Few corporations targeted with an all-cash tender offer could expect to remain independent in the 1980s. Today as proxy contests for board control replace tender offers as the primary takeover vehicle, the institutional vote is the key to survival. Along with providing superior returns, working with institutional investors on corporate governance is the single best way corporate management can create the class of patient investors it needs to return to a long-term planning horizon, lower its cost of capital and help it resist takeovers.

The Securities and Exchange Commission is likely to allow more types of shareholder proposals onto management proxy statements. In 1990, the SEC made a major policy shift by allowing proposals on golden parachutes and tobacco on the ballot. In the past, the SEC had rejected these proposals on grounds that they concerned ordinary business matters best left to management. At least one commissioner has suggested the SEC do away with all rules restricting shareholder proposals.

Institutional investors soon will be able to expect majority vote results on more of their proposals. These sponsors will make phone calls, hire proxy solicitors and distribute their own supporting material to generate higher vote counts. Following these sponsors, a growing number of index investors are fast learning the only way to improve performance when they are locked into a stock is by supporting other investors' initiatives designed to unlock value.

Institutional investors are not seeking to run the company, only to improve the corporate governance process, to foster more accountability in officers and directors. There is, in fact, more common ground between active investors and corporate management than the public debate implies.

Some corporations have adopted confidential voting policies, and submitted their poison pills and golden parachutes to a shareholder vote, without losing control of their company. And even in the most personal of corporate governance issues, executive compensation, some corporate managers have adopted new plans that reflect the shareholders' desire to pay for performance. General Mills Inc.'s new stock option plan, enthusiastically supported by shareholders, allows executives to participate only if they forgo annual merit raises.

Cooperation is still the exception. But alternatives to compromise are too costly. Corporate management will face more proxy contests for control, and will lose. They will not be able to focus on long-term business objectives, unless they provide exorbitant premiums in private placements to white squires. Institutional shareholders will grow less tolerant of poor governance practices that clearly lead to loss of value, and will have no other choice than to become even more active. As demonstrated by the reaction to Pennsylvania's new anti-takeover statute, investors do equate an erosion of basic shareholder rights with a loss of value, and will take their money elsewhere when that erosion goes too far. ■

Howard D. Sherman is vice president, Institutional Shareholders Services Inc., Washington.

LETTERS TO THE EDITOR

Venture capital reforms

■ Concerning Edwin Goodwin's Jan. 7 commentary, "Reformers put venture capital in danger," I believe the author has sidestepped the real issue: fairness. The venture capital business has changed dramatically in the past decade, and, yes, a primary reason has been the huge flow of funds into partnerships from institutional investors. But as long as venture capitalists are willing to accept this capital and take fees for managing it, they must be sensitive to the needs and requirements of the investors who have provided that capital.

For the most part, when a limited partner signs on the dotted line, he has locked up a significant amount of capital for 10 or more years. Certain provisions allow for an element of involvement by the limited partner, but the general partner essentially has a very large degree of freedom in managing and investing the capital. Many of the reforms now desired by what Mr. Goodman refers to as "self-appointed" reformers (I call them fiduciaries) will help limit any digression to excess and mismanagement.

Of course, if a prospective investor does not like the terms of any partnerships, he should not invest. But then, if a venture capitalist does not like the initial terms of any prospective deals, he should not invest (if we carry this through to its conclusion, no one would ever do business). Are the terms that many limited partners and gatekeepers are seeking (e.g., less current income and other cost containment terms) any different from those sought by the venture capitalist (e.g., reasonable salaries and proper financial controls in a portfolio company)? And limited partners do not necessarily have an "asset management mentality" (whatever that is) just as the venture capitalists who seek good financial controls in a deal do not necessarily have a "corporate mentality" (whatever that is).

The unfortunate side of this business is that we investors have somewhat of a "herd mentality." This problem will not go away easily. For now, the herd is just trying not to conduct itself like a blind stampede.

Susan Minis
Director-equity investments
GTE Investment Management Corp.
Stamford, Conn.

Don't abandon GICs/BICs

■ In your editorial "Risks of guarantees" (*P&I*, Jan. 7), we agree that diversification by GIC/BIC investors is an important and effective method of reducing risk. Most fiduciaries now employ some type of strategy to avoid concentrating their placements with one insurer. The rapid growth of GIC/BIC advisory services reflects this trend away from a single GIC/BIC provider.

It is something else entirely, however, to suggest that plan participants should be counseled to reduce their exposure to these assets. Participant preference for GICs reflects the conservative nature of most workers. Many shun market volatility, and older workers fear retiring in a down market. They have been willing to sacrifice added returns for a higher degree of stability and and unparalleled security.

Despite heightened scrutiny, the insurance industry remains healthy. Few GIC investors are exposed to significant default risks. With an aging workforce and an economy facing serious challenges, we urge sponsors to take care in trying to change participant investment patterns. This may be the wrong time to push investors toward a possibly more aggressive posture.

Surveys by our association indicate greater participant awareness of the need to diversify. Younger workers, particularly, see the long-term advantages of other assets. What is needed are better education offerings without a "bias" either way. We plan to develop literature to help participants better allocate their dollars in the context of their own risk tolerance.

Larry H. Mylnechuk
Executive director
The GIC Association Inc.
Lake Oswego, Ore.

A clarification from RREEF

■ In the article "RREEF funds maturing" (*P&I*, Feb. 4), attributed to me was the statement: RREEF "hired" IPC to represent the pension fund buyers with regard to our Specified Property Portfolio. This is not correct. RREEF did not hire IPC. Rather, RREEF selected IPC to begin due diligence on the portfolio properties. We did so, as you correctly reported, because IPC has extensive experience acting as an independent fiduciary in transactions that require approval by the Department of Labor. As is clearly stated in our filing to the Labor Department, IPC will be engaged not by RREEF, but by plan sponsors who own interests in Specified Property Portfolio-I.

Some other facts in the article should be corrected. We aren't trying to avoid a sale; rather we think this strategy will permit a sales transition that more fairly reflects the value of an assembled portfolio of 18 properties. Also, the meeting where our clients and the independent fiduciaries will discuss the transaction will be in May, not March.

Donald A. King Jr.
Managing partner
The RREEF Funds
Chicago

Montana ranks higher

■ The market value of the Montana Retirement System funds totaled $1.825 billion as of June 30, not the $1.5 billion as reported in the 1,000 Largest Funds issue (P&I, Jan. 21). As a result, the Montana system should have ranked 178 instead of 210.

The system has eight defined benefit plans and one defined contribution plan. The latter totaled only $6.5 million.

Robert T. Bugni
Assistant Investment Officer
Department of Commerce
State of Montana
Helena, Mont.

Rally is too little too late

4th-quarter surge can't keep stocks positive for 1990

By Terry Williams

A fourth-quarter rally in domestic equities softened the impact of last year's stock market drop, allowing commingled equity funds to post the highest returns for the quarter ended Dec. 31.

The rally, however, wasn't strong enough to salvage a year in which the average equity fund posted a negative return. Insurance company and bank commingled equity funds in the Pensions & Investments' Performance Evaluation Report universe showed a median return of 8.76% for the quarter, but −2.43% for the year ended Dec. 31. The median investment counselor in the PIPER+ universe delivered a 8.81% return for the quarter and −3.12% for the year.

The Standard & Poor's 500 Stock Index returned 8.98% for in the fourth quarter and −3.08% for the year ended Dec. 31.

Bond funds in both universes topped all other style categories for the one-year period. The median PIPER account advanced 8.75%; the median PIPER+ fund returned 8.69%.

For the quarter, the median fixed-income portfolio in the PIPER and PIPER+ universes earned returns of 4.48% and 4.92%, respectively.

The Shearson Lehman Brothers Government/Corporate Bond Index returned 5.1% for the quarter and 8.29% for the year.

The PIPER and PIPER+ reports are compiled by Rogers, Casey & Associates, Darien, Conn.

The stock market rallied in the fourth quarter in response to peace initiatives to resolve the Persian Gulf crisis and stabilizing oil prices, according to a Rogers, Casey report.

Investment managers who specialize in small-capitalization stocks posted the highest individual returns of the fourth quarter, though value managers as a whole had the best median return, 10.35% for the quarter, according to the PIPER+ survey.

Among PIPER+ equity funds, the leaders for the quarter were: Duncan-Hurst Capital Management's Small Cap Growth fund, with a return of 28.51%; Geocapital Corp.'s Small Cap account, 22.59%; and Insight Capital Management Inc.'s Small Capitalization portfolio, 19.7%.

PIPER equity leaders for the quarter were Provident Mutual Life Insurance Co.'s Separate Account 7, with a 18.69% return; First of America Bank Corp.'s Small Cap Value fund, 16.53%; and The Fifth Third Bank's EB Middle Cap portfolio, 16%.

Small-cap stock advocates view the fourth quarter results as the beginning of the end of a seven-year downward spiral in these securities.

Small-cap stocks reached their nadir in the September to early October period, according to James O. Collins, president of Insight Capital, Moraga, Calif.

At the same time, the economy went into its long-anticipated recession, the price of oil stabilized and there were indications from the Federal Reserve Board that the discount rate would again be lowered.

Equity investors perceived this as an opportunity to buy.

"If you go back over the last 50 years, stocks in general have made large gains during a recession, and small-caps have outperformed the large-caps for the 12 months following a recession," said William Duncan, chairman of Duncan-Hurst Capital Management, San Diego, Calif.

For Insight Capital, the Persian Gulf crisis was an added incentive to buy. "We found that when you go into a crisis, you are better off riding it through, especially when you expect it to be short," said Mr. Collins.

Insight Capital's research staff examined the state of the market one year and two years after the past 10 major international and/or economic crises, beginning with the Berlin Blockade in 1948 through John F. Kennedy's assassination in 1963, up to the 1987 market crash.

"One year later the market was up (on average) 26%; two years later it was up 38%," Mr. Collins said. "Also, we expected the discount rate to come down, which it did. Historical data said the market would rise over the next 12 months."

In the fourth quarter, health care and computer technology stocks benefited most from the rally, and are expected to continue to do so as the economy comes out of recession. But there is a belief that the small-cap advance will broaden.

"We may be seeing some of these health-related and technology companies' price-earnings ratios expand too fast to be sustained throughout the year," said Mr. Collins.

"At the moment we are looking for companies somewhat out of this area," he said. "There are other companies with modest p/e ratios with good growth rates."

Barry Fingerhut, senior vice president with Geocapital, New York, said his media holdings, which include cable television and cellular telephone companies, underperformed the Russell 2000 Index for the first nine months, but came back like a "shot" in November.

"The broad-based advance in the small-capital stocks gives me a feeling of comfort that this long period of decline is over," said Mr. Fingerhut.

In the technology area, Mr. Duncan is optimistic about companies that specialize in personal computer networking, personal computer software and automatic data capture. Biotechnology companies also are expected to have an earnings breakout in 1992 and 1993, he said.

Free-standing surgical centers, nursing homes and health maintenance organizations are the priority in the health field, Mr. Duncan added.

Mr. Collins expects the appreciation in small-cap stocks will be sustained because investors are now making investment decisions based on a company's earnings, not its assets.

"In the 1980s, investors were making assets plays," Mr. Collins said.

"They bought companies on the basis of undervalued assets.

"When the junk bond market collapsed, the asset game ended. There is a re-examination of the earnings power of companies." ■

PIPER+ fixed-income funds

Periods ended Dec. 31	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	10.50	38.28	18.77	16.08	21.03
First quartile	5.57	9.48	10.56	10.31	13.65
Median	4.92	8.69	9.97	9.76	13.11
Third quartile	3.83	7.55	9.24	9.21	12.55
Lowest return	0.20	-10.83	6.23	4.43	10.27
SLB G/C	5.10	8.29	10.00	9.49	12.60

PIPER+ equity funds

Periods ended Dec. 31	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	28.51	31.69	35.34	27.07	24.81
First quartile	10.91	0.85	15.56	14.43	17.62
Median	8.81	-3.12	13.35	12.75	15.20
Third quartile	6.47	-7.39	11.18	10.85	13.59
Lowest return	-11.10	-35.97	-7.33	0.58	6.66
S&P 500	8.98	-3.08	14.12	13.17	13.83

PIPER+ special equity funds

Periods ended Dec. 31	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	14.69	58.70	32.51	43.58	19.98
First quartile	8.54	-0.87	13.86	10.86	13.04
Median	1.85	-4.31	8.00	8.53	12.52
Third quartile	0.22	-9.10	4.26	5.97	11.07
Lowest return	-14.73	-19.69	-1.20	2.55	9.56
S&P 500	8.98	-3.08	14.12	13.17	13.83
Russell 2000	5.03	-18.51	5.33	2.42	8.46

Graphic by John J. Bohorquez

PIPER fixed-income funds

Periods ended Dec. 31	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	11.58	12.60	12.08	12.18	16.12
First quartile	5.58	8.58	10.17	9.97	13.47
Median	4.48	8.75	9.61	9.12	12.17
Third quartile	3.83	7.55	9.24	9.21	12.55
Lowest return	-4.95	-10.18	4.37	5.00	8.56

PIPER equity funds

Periods ended Dec. 31	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	18.69	36.17	26.56	18.92	22.84
First quartile	10.91	0.85	15.56	14.43	17.62
Median	8.76	-2.43	13.16	12.01	13.56
Third quartile	6.51	-6.11	10.99	10.85	13.59
Lowest return	-0.19	-24.98	-2.07	0.49	7.05
S&P 500	8.98	-3.08	14.12	13.17	13.83

PIPER special equity funds

Periods ended Dec. 31	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	23.98	20.69	25.65	21.14	16.33
First quartile	13.57	-0.50	15.79	11.66	15.06
Median	9.25	-6.43	11.73	8.92	12.16
Third quartile	5.89	-13.07	8.56	6.14	8.97
Lowest return	-5.21	-32.10	-4.45	-0.88	4.09
S&P 500	8.98	-3.08	14.12	13.17	13.83
Russell 2000	5.03	-18.51	5.33	2.42	8.46

Graphic by John J. Bohorquez

Specialty real estate funds dominate period

By Steve Hemmerick

A small regional mall closed-end fund outscored all other commingled real estate funds in the Pensions & Investments Performance Evaluation Report universe, scoring about 2,000 basis points over median fund returns for the year ended Sept. 30.

Equitable Real Estate Investment Management Inc.'s $393 million HPF1 fund posted a 26.4% return for the year. The median PIPER closed-end fund returned 6.75%; the median PIPER open-end fund advanced 4.49%.

The PIPER numbers showed wide variation in returns among commingled real estate funds. The figures also showed that specialty real estate funds of major insurance companies and banks dominated in performance.

Most of the return from Equitable's HPF1 fund, 21 percentage points, came from appreciation gains similar to what many malls received during the last quarter of 1989 and first quarter of 1990, said Jonathan Miller, a vice president with Equitable Real Estate, New York.

He said future returns for the fund will be affected by softening in real estate appreciation, but the fund will continue to provide "relatively strong returns."

The top performing open-end fund for the year ended Sept. 30, with a total return of 18.3%, was the $875 million John Hancock Financial Services' Separate Accounts fund, which focuses on timberland investments, according to Rick Smith, director of portfolio management for the Timber Resources Group at John Hancock.

Mr. Smith said about two-thirds of the fund's return came from appreciation in acreage. He expects the annual return of the fund, which still is investing assets, to be 10% to 15%.

Another of Boston-based Hancock's timberland funds — the $17 million ForesTree I — placed second among closed-end funds for the one-year period with a total return of 22.2%.

While nearly three-fourths of the return for ForesTree I came from appreciation, some of it came from the sale of timberland, said Mr. Smith. About 10% of the fund's timber acreage, which rose sharply in value, was sold.

The remaining properties in the fund, which was established in 1985, will be sold off during the next five years.

Mr. Smith expects ForesTree I also to have an average annual return of 10% to 15%. About 40% of ForesTree I acreage is in the Pacific Northwest, and 60% is in the Southeast.

Equitable Real Estate's $302.6 million EQK III fund ranked third among closed-end funds, returning 14.9% for the year. The fund has equity interest in four re-

See **Specialty** *on page 28*

Top decile PIPER commingled fixed-income funds

3-month returns

	%
Lincoln Nat'l (Long), Ind.	11.6
Equitable Capital (No. 5), N.Y.	10.3
Boatmen's Trust (F), Mo.	10.1
Prudential (Long term), N.J.	8.8
NCNB Nat'l (Long term), N.C.	7.9
Chase-CMB (Long term), N.Y.	7.8
Commerce Bank, Mo.	7.6
State Bank (D), Ohio	6.9
CIGNA Corp. (Active), Conn.	6.9
U.S. Trust, N.Y.	6.8
PW Trust (Conserv.), N.J.	6.7
Life of Virginia	6.5
Metropolitan Life (S.A. 41), N.Y.	6.4
First Variable Life (H.Q.), Ark.	6.4
Star Bank (Unres.), Ohio	6.2
Bank of Delaware	6.2
Star Bank (PT unres.), N.J.	6.1
Transamerica (S.A. T2), Calif.	6.1
Hawaiian Trust	6.0
IDS Trust (A), Minn.	6.0
Meridian, Pa.	6.0
AmSouth, Ala.	5.9
Key Trust, N.Y.	5.8
CL Capital, Ga.	5.8
New York Life (S.A. 4)	5.8
Sunburst Bank, Miss.	5.8
Ameritrust (GNMA), Ohio	5.8
SLB G/C	**5.1**

1-year returns

	%
SW Nat'l Bank of Pennsylvania	12.6
Bank of Delaware	10.9
United Capital, Colo.	10.9
Chase-CMB (Sec. mtg.), N.Y.	10.6
First Nat'l of Maryland	10.6
Ameritrust (GNMA), Ohio	10.4
Star Bank (Interm.), Ohio	10.4
Connecticut Nat'l Bank	10.4
Morgan Guaranty, N.Y.	10.4
Ameritrust Texas	10.3
LaSalle Nat'l (Inter. gov't), Ill.	10.2
Assoc. Bank-Neenah, Wis.	10.1
First Union Nat'l, N.C.	10.1
Wellington Trust (Interm.), Mass.	10.1
Ameritrust (Reserve), Ohio	10.1
General American (S.A. 6), Mo.	10.1
Mercantile Safe (Interm.), Md.	10.0
Shearson Trust (IF2), Del.	10.0
Nat'l Bank of Detroit	10.0
Shearson Trust (IF3), Del.	10.0
Shearson Trust (IF1), Del.	9.9
Central Bank Denver	9.9
Shawmut Bank (Interm.), Mass.	9.9
Shearson Trust (IF5), Del.	9.9
The Principal, Iowa	9.9
Mercantile Safe, Md.	9.9
Comerica (Interm.), Mich.	9.9
Valley Fidelity, Tenn.	9.9
SLB G/C	**8.3**

5-year returns

	%
Meridian, Pa.	12.2
Equitable Capital (No. 5), N.Y.	12.0
Transamerica (S.A. T2), Calif.	11.9
General American (S.A. 9), Mo.	11.1
General American (S.A. 6), Mo.	11.0
The Principal, Iowa	10.9
IAA Trust (B), Ill.	10.8
United Capital, Colo.	10.8
Boatmen's Trust (F), Mo.	10.7
Prudential (Long term), N.J.	10.7
Pacific Financial, Calif.	10.7
First Nat'l Amarillo, Texas	10.7
Morgan Guaranty, N.Y.	10.6
Sanwa Bank (C), Calif.	10.6
Harris Trust, Ill.	10.6
Chase-CMB (Long term), N.Y.	10.5
Connecticut Nat'l Bank	10.4
Beverly Trust, Ill.	10.4
Aetna Life (Shares), Conn.	10.3
Fidelity Bank, Pa.	10.3
Marine Midland, N.Y.	10.3
Mercantile Safe, Md.	10.3
CoreStates Invst., Pa.	10.3
First Wachovia, N.C.	10.3
First Kentucky Trust	10.2
SLB G/C	**9.5**

10-year returns

	%
Transamerica (S.A. T2), Calif.	16.1
Meridian, Pa.	15.4
United Capital, Colo.	14.9
Boatmen's Trust (F), Mo.	14.5
Sovran Capital, Va.	14.3
Life of Virginia	14.2
First Kentucky Trust	14.1

Connecticut Nat'l Bank	14.1
Sanwa Bank (C), Calif.	14.0
Beverly Trust, Ill.	14.0
IAA Trust (B), Ill.	14.0
Pacific Financial, Calif.	13.9
ASB Capital, D.C.	13.8
First Nat'l Amarillo, Texas	13.8
Morgan Guaranty, N.Y.	13.7
Society Nat'l, Ohio	13.6
Prudential (Privest), N.J.	13.6
SLB G/C	**12.8**

Top decile PIPER commingled equity funds

3-month returns

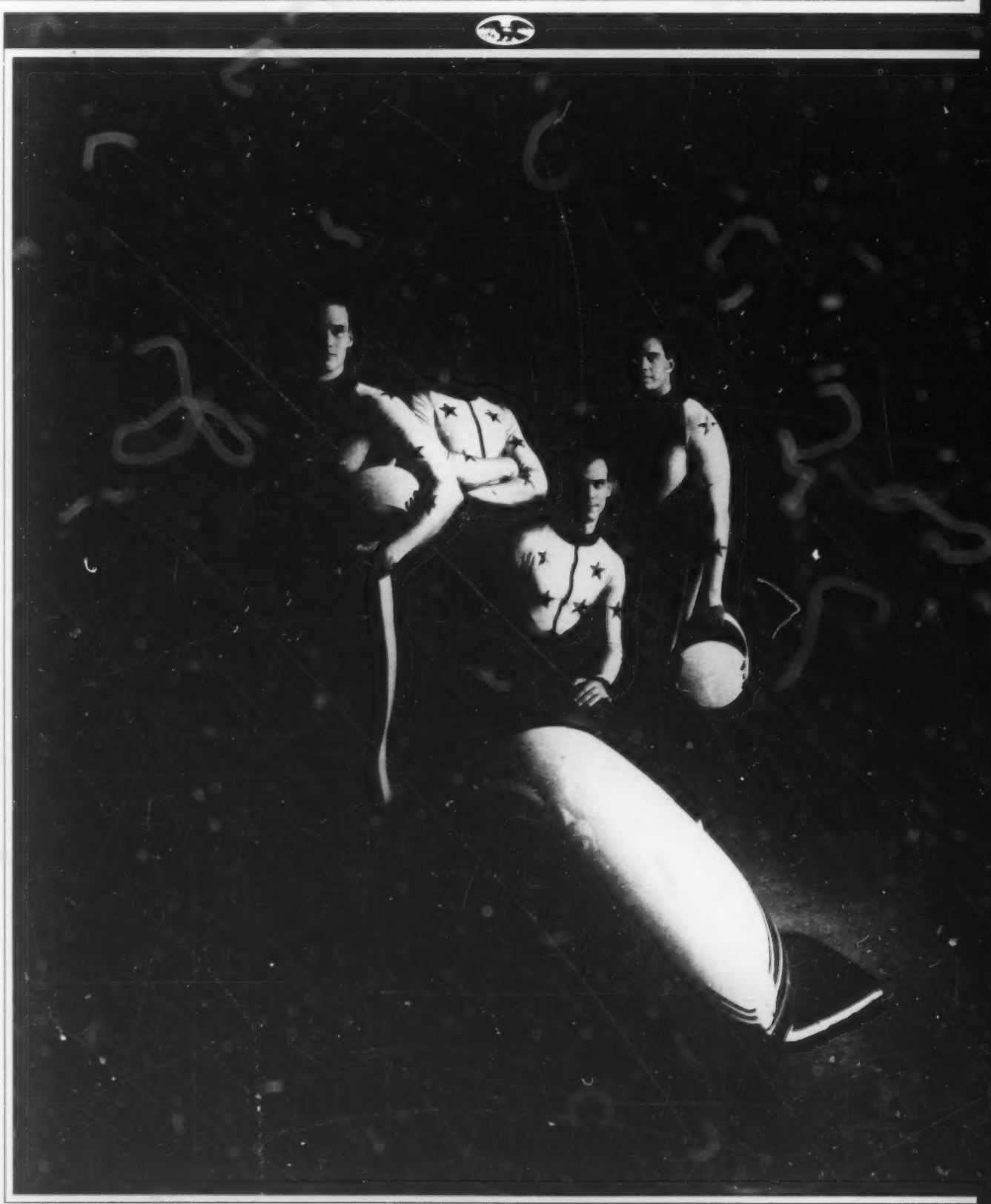
	%
Provident Mutual (S.A. 7), Pa.	18.7
First of America (Sm. cap. value)	16.5
Fifth Third Bank (Mid. cap.), Ohio	16.0
First Nat'l of Tulsa, Okla.	16.0
Prudential (Earn. mo.), N.J.	15.2
First Trust Corp., Colo.	14.8
Northern States, Ill.	14.5
Shearson Trust (EF6), Del.	14.2
Merus Capital (Sp. growth), Calif.	14.1
Chancellor (Growth), N.Y.	13.5
Mercantile Safe (2nd century), Md.	13.5
Home Life, N.Y.	13.2
Equitable Capital (No. 4), N.Y.	13.1
Chancellor (Multifact), N.Y.	13.1
State Street (Matrix syn./CM9)	13.1
Penn Mutual (S.A. A), Pa.	13.1
Chancellor (Styleshift), N.Y.	12.8
PW Trust (Value), N.J.	12.7
First Union Nat'l, N.C.	12.7
Liberty Nat'l, Okla.	12.6
Pacific Financial (Sm. cap.)	12.5
Wellington (Div. growth), Mass.	12.5
NBD Trust, Ill.	12.0
Manufacturer Affiliate (Gro.), Ill.	12.0
Manufacturers Detroit (E)	12.0
Pacific Financial (Cap. app.)	11.9
Riggs Nat'l, D.C.	11.8
Fifth Third Bank, Ohio	11.7
BayBanks Invst., Mass.	11.7
Second Nat'l Bank (Growth), Ohio	11.7
Pacific Financial (Div. low p/e)	11.6
S&P 500	**9.0**

1-year returns

	%
Minnesota Mutual (S.A. C)	36.2
Princeton Bank, N.J.	10.8
The Phoenix, Conn.	8.8
First American of Georgia	8.0
Chancellor (Growth), N.Y.	7.7
Chancellor (Sel. growth), N.Y.	7.7
Commercial Capital (Sp. gro.), Ark.	7.7
SW Nat'l Bank of Pennsylvania	7.5
Sentry Equity (S.A. B), Wis.	7.1
CoreStates Invst. (Growth), Pa.	6.5
Sanwa Bank (D), Calif.	5.7
NBD Trust, Ill.	5.6
Commerce Bank, Mo.	5.6
Fifth Third Bank-Toledo, Ohio	5.4
Bank of New York	5.3
Summit Trust, N.J.	5.2
Chicago Title & Trust, Ill.	5.0
First Nat'l of Tulsa, Okla.	4.9
American Nat'l Bank, Ind.	4.7
Shearson Trust (EF7), Del.	4.6
United Carolina Bank, N.C.	4.6
Norwest Bank, Minn.	4.6
Aetna Life (S.A. 2), Conn.	4.5
Liberty Nat'l, Okla.	4.5
Commercial Capital, Ark.	4.2
First Alabama Bank (I)	4.0
The Phoenix (Growth S), Conn.	4.0
Assoc. Manitowoc, Wis.	3.9
The New England (Sep. cap. gro.)	3.9
First Illinois (Personal)	3.7
New York Life (S.A. 1)	3.7
S&P 500	**3.1**

5-year returns

	%
Chancellor (Sel. growth), N.Y.	18.9
Shearson Trust (EF7), Del.	18.9
Sun Bank, Fla.	18.8
Pacific Financial (Sm. cap.)	18.1
Bank One, Indianapolis (L)	17.4
The Phoenix (Growth S), Conn.	17.3
State Street (Matrix syn./CM9)	16.9
Lincoln Nat'l (Select), Ind.	16.8
NCNB Nat'l (Growth), N.C.	16.5



Assoc. Manitowoc, Wis.	16.4
First Nat'l Amarillo, Texas	16.3
Mark Twain Bank, Mo.	15.9
Chancellor (Growth), N.Y.	15.8
Minnesota Mutual (S.A. C)	15.8
IDS Trust (Core growth), Minn.	15.7
Pacific Financial (Cap. app.)	15.6
South Carolina Nat'l	15.3
Pacific Financial (Income)	15.3
Southtrust Bank, Ala.	15.3
First American of Georgia	15.1
Assoc. Bank-Neenah (I), Wis.	15.0
Chancellor (Indexplus), N.Y.	15.0
First Illinois (Personal)	15.0
The Phoenix, Conn.	15.0
Wheeling Doll... Bank (B), W. Va.	15.0
Bank One Wis. Trust (Growth)	14.9
S&P 500	**13.2**

10-year returns

	%
Sun Bank, Fla.	22.8
Pacific Financial (Cap. app.)	20.3
Provident Mutual (S.A. 1), Pa.	18.1
Merus Capital (Income), Calif.	17.3

First Nat'l Amarillo, Texas	17.2
U.S. Nat'l Bank, Texas	17.2
First Union Nat'l, N.C.	17.2
First Fidelity (Sel. value), N.J.	17.1
First NH Invst. (A)	16.8
Merus Capital (Growth plus), Calif.	16.6
Wheeling Dollar Bank (B), W. Va.	16.5
Manufacturer Affiliate (Gro.), Ill.	16.5
Manufacturers Detroit (E)	16.5
United Capital, Colo.	16.5
Markston Invst., N.Y.	16.3
First Nat'l of Omaha (D), Neb.	16.3
First Wisconsin (Portico inc./gro.)	16.2
Dominion Capital (Corp.), Va.	16.2
Minnesota Mutual (S.A. C)	16.1
S&P 500	**13.9**

Top decile PIPER commingled special equity funds

3-month returns

	%
Chancellor (Em. health), N.Y.	24.0
Princeton Bank (Em. gro.), N.J.	22.8
Manufacturers Detroit (Sm. cap. I)	22.2
Chase-CMB (Sm. cap. gro.), N.Y.	20.4
Chase-CMB (Med. cap.), N.Y.	20.4
Putnam Cos. (Spec. gro.), Mass.	18.4
Equitable Capital (Gro. 3), N.Y.	17.1
S&P 500	**9.0**
Russell 2000	**5.0**

1-year returns

	%
Chancellor (Em. health), N.Y.	20.7
Equitable Capital (Convert.), N.Y.	20.3
Equitable Capital (Gro. 3), N.Y.	9.4
Princeton Bank (Em. gro.), N.J.	7.3
Lincoln Nat'l (Sp. opp.), Ind.	6.4
Norwest Bank, Minn.	4.1
Shearson Trust (EF2), Del.	3.5
S&P 500	**-3.1**
Russell 2000	**-18.5**

5-year returns

	%
Shearson Trust (EF2), Del.	21.1
Shearson Trust (EF3), Del.	18.5
Putnam Cos. (Sp. growth), Mass.	15.8
Connecticut Nat'l Bank	14.7
Equitable Capital (Convert.), N.Y.	14.7
Norwest Bank, Minn.	14.0
S&P 500	**13.2**
Russell 2000	**2.4**

10-year returns

	%
Bessemer Trust (Em. gro.), N.Y.	16.3
Norwest Bank, Minn.	16.2
First Wis. Asset (Growth B)	16.2
S&P 500	**13.9**
Russell 2000	**8.5**

Top half PIPER commingled international funds

3-month returns

	%
Chase-CMB (Fixed), N.Y.	11.7
FTA Europe & Pacific	**11.6**
Travelers Cos. (Fixed), Conn.	11.2
Trust Co./West (Global), Calif.	11.1
Citicorp Invst. (Fixed), N.Y.	11.1
Wells Fargo (Equity index), Calif.	10.7
Bankers Trust (EAFE), N.Y.	10.6
MSCI EAFE	**10.6**
FTA World	**10.5**
State Street (Index), Mass.	10.3
Chase-CMB (EAFE), N.Y.	10.1
MSCI World	**9.8**
Global Fixed Income (Bond)	9.6
U.S. Trust, N.Y.	9.5
First NH-Bank Ireland (Eq.)	9.2
Global Fixed Income (Glo. bond)	9.1
Chase-CMB (Equity), N.Y.	8.9
Provident Capital (Low p/e), Pa.	8.8
Aetna Life (S.A. 137 equity), Conn.	8.7
Connecticut Mutual (Overseas)	8.5
Ameritrust Texas (Bond)	8.4
CIGNA Corp. (Equity), Conn.	8.0
Morgan Guaranty (Bond), N.Y.	7.6
Travelers Cos. (S.A. W), Conn.	7.5
CL Capital (Stock), Ga.	7.4
Ameritrust Texas (Equity)	7.3

1-year returns

	%
Citicorp Invst. (Fixed), N.Y.	21.6
Chase-CMB (Fixed), N.Y.	18.4
Morgan Guaranty (Bond), N.Y.	17.6
Global Fixed Income (Glo. yield)	16.8
Global Fixed Income (Glo. bond)	15.2
Ameritrust Texas (Bond)	15.1
Global Fixed Income (Bond)	14.4
IAA Trust (CTF I), Ill.	2.1
CIGNA Corp. (Equity), Conn.	-0.2
NCNB Nat'l (Equity), N.C.	-1.8
Trust Co./West (Global), Calif.	-2.0
Lincoln Nat'l (S.A. 22), Ind.	-3.5
First NH-Bank Ireland (Eq.)	-3.8
IDS Int'l (Equity), Minn.	-4.4
Putnam Cos. (Equity), Mass.	-6.6
CL Capital (Stock), Ga.	-6.8
U.S. Trust, N.Y.	-8.2
Travelers Cos. (S.A. W), Conn.	-8.4
Connecticut Mutual (Overseas)	-9.1
Provident Capital (Low p/e), Pa.	-9.3
The Principal (Stock), Iowa	-9.6
Wellington Trust (Emerg. eq.)	-10.1
MSCI World	**-16.5**
FTA World	**-17.1**
MSCI EAFE	**-23.2**
FTA Europe & Pacific	**-23.8**

5-year returns

	%
CIGNA Corp. (Equity), Conn.	22.9
Provident Capital (Low p/e), Pa.	22.9
Global Fixed Income (Glo. bond)	20.7
CL Capital (Stock), Ga.	20.3
Wellington (Pacific Basin), Mass.	19.8
U.S. Trust, N.Y.	19.8
Bankers Trust (Equity), N.Y.	19.5
NCNB Nat'l (Equity), N.C.	19.0
Bessemer Trust (E), N.Y.	19.0
FTA Europe & Pacific	**18.6**
Chase-CMB (EAFE), N.Y.	18.4
State Street (Index), Mass.	18.4
Wells Fargo (Index), Calif.	18.4
MSCI EAFE	**18.4**
Chase-CMB (Fixed), N.Y.	17.6
IDS Int'l (Equity), Minn.	17.0
FTA World	**15.3**
MSCI World	**15.1**

10-year returns

	%
Bankers Trust (Equity), N.Y.	17.8
Putnam Cos. (Equity), N.Y.	17.3
MSCI EAFE	**17.0**
FTA Europe & Pacific	**16.7**
U.S. Trust, N.Y.	16.3
MSCI World	**14.9**
Bessemer Trust (E), N.Y.	14.7
FTA World	**13.2**

Top decile PIPER + fixed-income funds

3-month returns

	%
Peters, Gamm, West & Vincent	10.5
Equitable Capital (No. 5)	10.3
Income Research (Long duration)	10.0
Bridgewater Asset (Act. dur.)	10.0
Duff & Phelps Invst. (Value)	9.3
Criterion Invst. (Long)	9.0
Leshner Financial (Treas.)	8.8
Anhalt/O'Connell (Ex. maturity)	8.7
Security Capital (En. long term)	8.4
Perpetual Advisory (Stamp)	8.4
Bradford & Marzec (Long dur.)	7.8

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Investment Advisers (Act. dur.)	7.8
MacKenzie Invst. (Core)	7.7
Investment Advisors	7.5
STW Fixed Income (Long)	7.3
Denver Invst. (Long term)	7.1
Jamison Eaton & Wood (Lg. pub.)	7.1
NWQ Invst.	7.0
Wright Investor's	7.0
Durkee Capital (Act. quant.)	6.7
Trevor Stewart Burton & Jacobson	6.7
Criterion Invst. (Total return)	6.7
Smith Affiliated Capital	6.6
SLB G/C	**5.1**

1-year returns

	%
Perpetual Advisory (Stamp)	38.3
Seaboard Invst.	14.7
Duff & Phelps Invst. (Value)	13.3
Hoisington Invst.	13.2
Wagstaff, Lodefink & Assoc.	12.0
American & European (P-max)	11.3
Morgan Grenfell Capital	11.1
Durkee Capital (Act. quant.)	11.1
Criterion Invst. (Mtg.)	11.0
Smith Breeden (Mtg. short dur.)	11.0
Fox Asset Mgmt.	10.9
Atlantic Portfolio Analytics (A)	10.7
Dimensional Fund (5-year)	10.7
Independence One (PRIMA V)	10.7
INVESCO Capital	10.4
Bell Capital (Mgd.)	10.3
McCowan Assoc.	10.2
Cumberland Advisors	10.1
JCW Invst. (Value # up)	10.1
Brundage, Story and Rose	10.1
U.S. Trust of California	10.0
Munder Capital (Act.)	10.0
RNC Capital (ST gov't)	9.9
SLB G/C	**8.3**

5-year returns

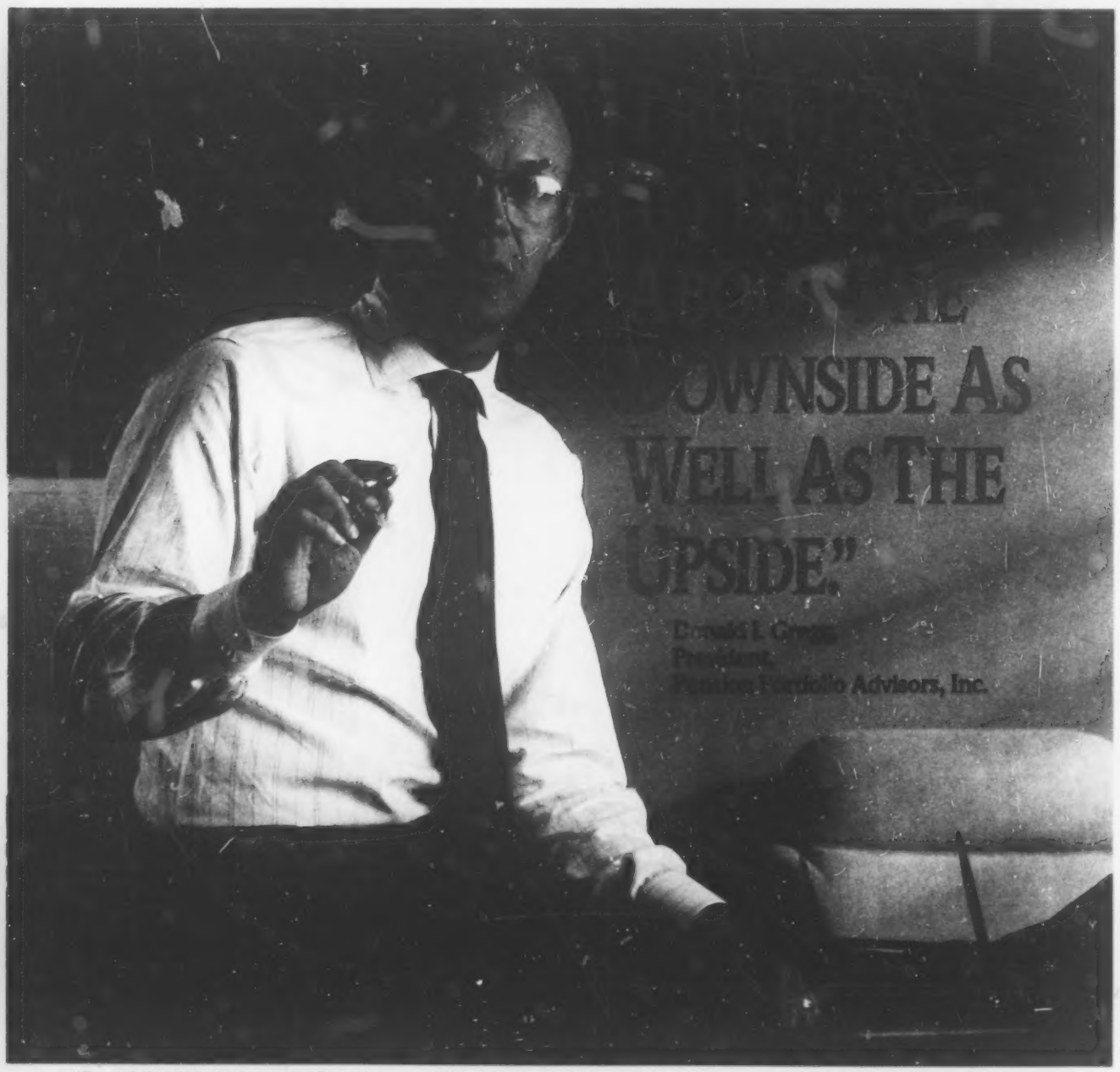
	%
Seaboard Invst.	16.1
Bridgewater Asset (Act. dur.)	14.8
Fox Asset Mgmt.	13.8
Morgan Grenfell Capital	13.0
Meridian Invst.	12.2
American & European (P-max)	12.0
Hoisington Invst.	12.0
Equitable Capital (No. 5)	12.0
STW Fixed Income (Long)	11.8
Durkee Capital (Act. quant.)	11.7
Wagstaff, Lodefink & Assoc.	11.5
Ferguson & Wellman (Int. rate)	11.1
SAFECO Asset	11.1
Jamison Eaton & Wood (Lg. pub.)	11.1
Dolan Capital	11.1
Duff & Phelps Invst.	11.0
Miller Anderson & Sherrerd (Mtg.)	11.0
Pacific Invst. Mgmt., (Tot. ret.)	11.0
Consistent Asset (Total return)	11.0
SLB G/C	**9.5**

10-year returns

	%
Bridgewater Asset (Act. dur.)	21.0
Consistent Asset (Total return)	16.1
Smith Affiliated Capital	16.0
STW Fixed Income (Long)	15.7
Morgan Grenfell Capital	15.7
Meridian Invst.	15.4
Wolf Webb Burk Campbell	15.3
Huff Asset	15.2
Independence One (PRIMA X)	15.1
Miller Anderson & Sherrerd (Mtg.)	15.1
Rightime Econometrics (Tr. cash)	15.0
Greenwich Asset	15.0
Dolan Capital	14.9
SLB G/C	**12.8**

Top decile PIPER + equity funds
3-month returns

	%
Duncan-Hurst (Sm. cap. gro.)	28.5
Geocapital (Sm. cap.)	22.6
Insight Capital (Sm. cap.)	19.7
Morgan Stanley Asset (Em. gro.)	19.7
Wasatch Advisors (Rep.)	19.4
Mt. Auburn Mgmt.	19.2
Putnam Cos. (Sp. growth)	18.3
Fred Alger (Sm. cap.)	18.2
Scudder Stevens Clark (Sm. co.)	17.4
Equitable Capital (Sp. growth)	17.1
Securities Counsel (Sm. cap.)	16.5
J&W Seligman (Gro. & income)	16.4
Hellman, Jordan	16.2
Wilke/Thompson (Sm. cap. gro.)	16.2
Hellman, Jordan (Combustion)	16.1
Granahan Invst. (Explorer II)	16.0
Wright Investor's (Sm. cap.)	15.8
Baring America (Evs.)	15.8
Peregrine Capital (Sm. cap.)	15.4
Wasatch Advisors (Comp.)	15.4
Putnam Cos. (OTC emerg. gro.)	15.3
Provident Invst. (Stellar)	15.0
Standish, Ayer & Wood (Sm. cap.)	15.0
Wall Street Assoc. (Sm. cap. gro.)	14.9
Nelson, Benson & Zellmer	14.8
Dawson Samberg (Growth)	14.8
Fred Alger (Comp.)	14.7
McCowan Assoc. (Spec.)	14.7
Cooke & Bieler	14.6
Jundt Assoc. (Sm. cap.)	14.6
Cheswick Invst.	14.3
Hatteras Capital	14.3
Severn Assoc. (I)	14.2
New Amsterdam Partners (Two)	14.0
Waite & Correnti	14.0
Wright Investor's (Quality core)	14.0
Harris Bretall Sullivan & Smith	13.9
Ashfield & Co.	13.7
Hanson Invst.	13.6
Brown Capital (Rel. value)	13.5
Munder Capital (Dem. growth)	13.5



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Systematic Fin. (High cash flow)	13.4
S&P 500	**9.0**

1-year returns

	%
Dunnavan & Co. (Act. short sell)	31.7
Securities Res. (Kemper Summit)	19.2
Lehman Ark (Sp. sit.)	18.4
Securities Res. (Putnam Voyager)	16.2
Mt. Auburn Mgmt.	14.7
Rampart Invst. (Momen. capture)	13.5
Jundt Assoc. (Sm. cap.)	13.3
Duncan-Hurst (Sm. cap. gro.)	12.1
Cheswick Invst.	12.0
Securities Res. (Nat'l)	11.3
Tukman Capital	10.6
Cohen, Davis & Marks	10.5
Gateway Invst (Index ra.)	10.4
Equitable Capital (Sp. growth)	9.4
Dawson Samberg (Growth Pequot)	9.2
Cooke & Bieler	9.1
Hatteras Capital	8.6
Combined Capital (Quality gro.)	8.5
Dundee Partners	7.9
Pension Mgmt.	7.7
Scudder Stevens Clark (Sm. co.)	7.5
Morgan Stanley Asset (Em. gro.)	7.4
Wasatch Advisors (Comp.)	7.3
Northern Invst.	7.2
Provident Invst.	7.0
Ashland Mgmt.	6.8
Harris Bretall Sullivan & Smith	6.8
Fred Alger (Sm. cap.)	6.7
Wilke Thompson (Sm. cap. gro.)	6.7
General American (Closed end)	6.5
Wilke Thompson (Growth)	6.5
Robert W. Baird (Quality gro.)	5.7
Lincoln Capital	5.4
Lynch & Mayer (Growth)	5.0
Kidder Peabody (Max. return)	5.0
MacKay-Shields (Growth)	5.0
Aetna Life (Lg. cap. gro.)	4.9
Securities Res. (Dreyfus Growth)	4.8
Peregrine Capital (Growth)	4.7
Renaissance Invst.	4.7
Granahan Invst. (Explorer II)	4.6
Willoughby Holin & Rentner (Gro.)	4.4
S&P 500	**3.1**

5-year returns

	%
Ashfield & Co.	27.1
C.H. Brown (Computer dir.)	22.6
Quantitative Asset (En. index)	22.4
Kingsly Jennison McNulty Morse	22.2
Hatteras Capital	21.6
Cheswick Invst.	21.1
Duncan-Hurst (Sm. cap. gro.)	21.0
DeJarnette Invst.	19.7
Securities Res. (Dreyfus Growth)	19.6
Pension Mgmt.	19.5
Jundt Assoc. (Sm. cap.)	19.4
Combined Capital (Quality gro.)	19.2
Dundee Partners	18.9
Tukman Capital	18.2
WR Lazard (Growth)	17.9
Turner Neill Invst. (Core)	17.7
Invst. Research (Max growth)	17.5
Breau Capital	17.5
Hutson Mgmt. (Growth)	17.4
Institutional Capital	17.3
Lehman Ark (Sp. sit.)	17.2
Balch Hardy Scheinman Winston	17.1
Jurika & Voyles	17.0
Davis, Weaver & Mendel	17.0
Columbus Circle	17.0
Lincoln Capital	16.9
Leylegian Invst.	16.9
Fayez Sarofim	16.8
Arnhold S. Bleichroeder (Bot. up)	16.7
Provident Invst.	16.4
Lynch & Mayer (Growth)	16.3
Argus Investors' (Lg. cap.-divers.)	16.3
First Security	16.2
John A. Levin (Cap. weighted)	16.1
Harris Bretall Sullivan & Smith	16.1
Brinson Partners	16.1
S&P 500	**13.2**

10-year returns

	%
Ashfield & Co.	24.8
C.H. Brown (Computer dir.)	23.8
Balch Hardy Scheinman Winston	22.0
GAMCO Investors (ERISA)	21.8
Severn Assoc. (I)	21.6
Securities Res. (Dreyfus Growth)	21.3
Quantitative Asset (En. index)	21.1
Roxbury Capital	21.0
Nicholas-Applegate (En. growth)	20.8
Cadence Capital (Lg. cap.)	20.4
Neuberger and Berman	20.2
Roger Engemann & Assoc.	20.0
MPI Invst.	19.9
Ashland Mgmt.	19.9

Delta Financial (Value)	19.8
Fox Asset	19.7
Leylegian Invst.	19.6
First Security	19.5
Systematic Fin. (High cash flow)	19.4
Wiltshire Asset (Sm. comp. value)	19.3
Tom Johnson Invst.	19.2
Caldwell & Orkin	19.2
Capital Growth	19.2
Geewax Terker & Co.	19.1
S&P 500	**13.9**

Top decile PIPER + special equity funds

3-month returns

	%
Brinson Partners (Post venture)	14.7
MPT Assoc. (Agg. growth)	14.1
Riggs Invst. (Growth)	13.4
Equitable Capital (Convert.)	10.6
S. Squared Tech (Sm. cap.)	10.2
S&P 500	**9.0**

Russell 2000	**5.0**

1-year returns

	%
Feshbach Brothers (Southgate)	58.7
Pacific Century (SPNB agg.)	40.0
RTA Mgmt. (Hedge)	36.1
Equitable Capital (Convert.)	5.7
Axe-Houghton (Emerg. growth)	5.3
S&P 500	**-3.1**
Russell 2000	**-18.5**

5-year returns

	%
Feshbach Brothers (Southgate)	43.6
NFJ Invst. (Select)	35.5
W.H. Reaves (Utility energy)	15.0
S&P 500	**13.2**
Russell 2000	**2.4**

10-year returns

	%
W.H. Reaves (Utility energy)	20.0

IDC Portfolio (Utility)	18.7
S&P 500	**13.9**
Russell 2000	**8.5**

Top half PIPER + global equity funds

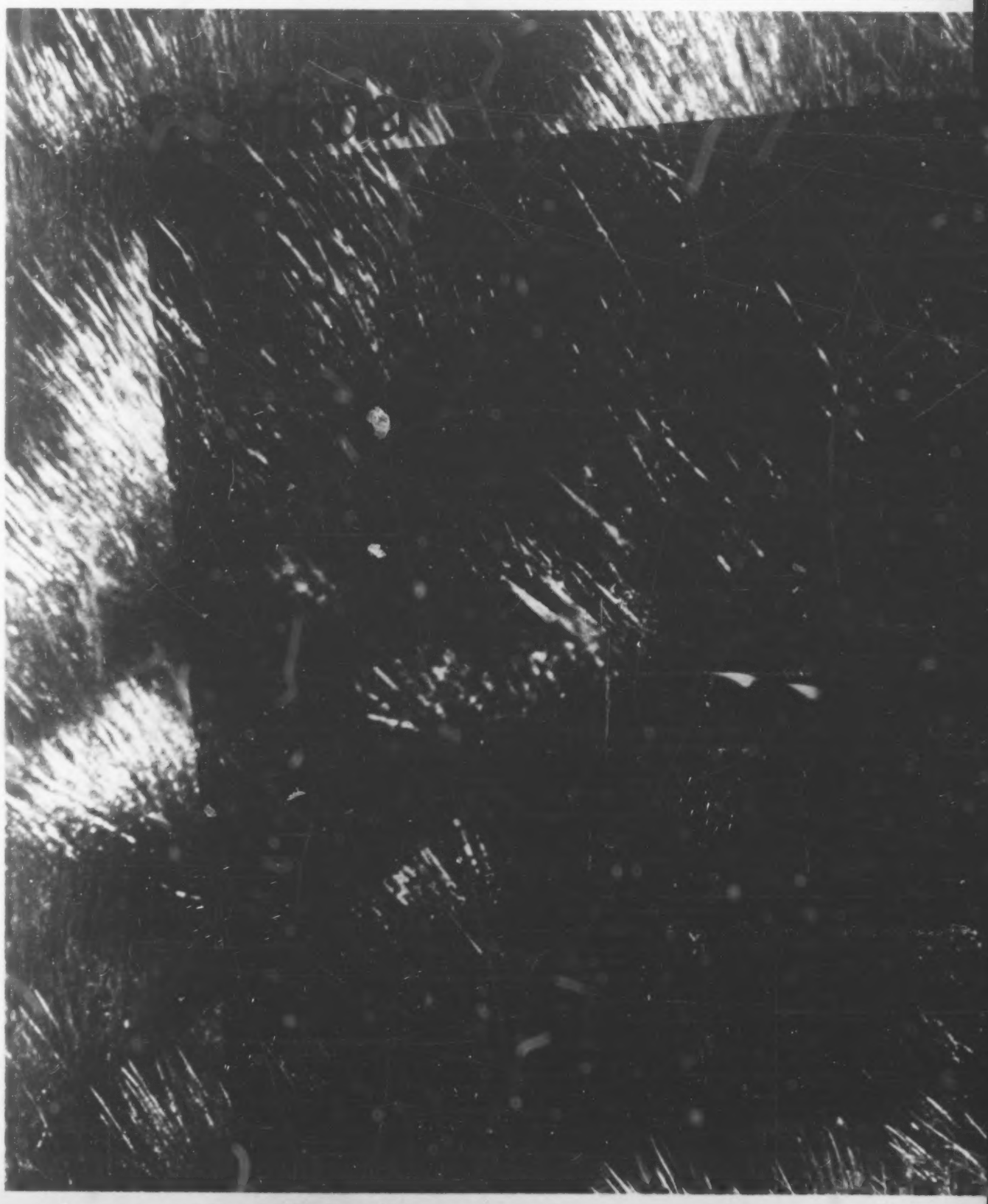
3-month returns

	%
FTA World	**10.5**
Parametric Portfolio	9.9
MSCI World	**9.8**
Stewart, Ivory (RCB/Stewart)	9.7
IDS Int'l	9.5
Edinburgh Wilmington Int'l	8.5
First Interstate Bank of California	8.4
Brinson Partners	8.2
Marvin & Palmer	7.6
Ivory & Sime Int'l (3)	7.3
Credit Suisse Asset	7.0
Capital Guardian (New Persp. F)	6.8
James Capel Fund	6.6
GIM Global	6.4

Martin Currie (A)	6.2
Fiduciary Trust	6.0
HD Int'l	5.9
Lexington Mgmt.	5.8
Putnam Cos.	5.7

1-year returns

	%
IDS Int'l	-0.4
Capital Guardian 'New persp. F)	-2.1
Martin Currie (A)	-3.6
Credit Suisse Asset	-4.3
Fiduciary Trust Co. Int'l	-4.9
Brinson Partners	-6.3
Marvin & Palmer	-6.7
Edinburgh Wilmington Int'l	-6.7
Horn & Co.	-7.7
Ivory & Sime Int'l (3)	-7.8
Van Eck Assoc. (World trends)	-8.2
Putnam Cos.	-8.5
Stewart, Ivory (RCB/Stewart)	-8.9
Scudder Stevens & Clark	-8.9
Henderson Admin.	-10.0
GIM Global	-10.2



James Capel Fund	10.5
MSCI World	**16.5**
FTA World	**17.1**

5-year returns

	%
Burgess Capital	23.6
Martin Currie (A)	21.5
WorldInvest	20.2
Brinson Partners	18.6
Stewart, Ivory (RCB Stewart)	18.1
Ivory & Sime Int'l (3)	17.8
IDS Int'l	17.0
Warburg Invst. (SL3)	16.3
Credit Suisse Asset	16.0
HD Int'l	15.7
Scudder Stevens & Clark	15.3
FTA World	**15.3**
MSCI World	**15.1**
Marvin & Palmer Assoc.	15.1
Fiduciary Trust Co. Int'l	14.7

Proxy season preview: April 15.

10-year returns

	%
Burgess Capital	20.3
WorldInvest	17.7
Brinson Partners	16.5
MSCI World	**14.9**
FTA World	**13.2**

Top half PIPER + international equity

3-month returns

	%
Murray Johnstone	14.1
FTA Europe & Pacific	**11.6**
Julius Baer Invst.	11.3
Wells Fargo Invst.	10.8
Parametric Portfolio	10.7
Bankers Trust Invst. (EAFE)	10.6
MSCI EAFE	**10.6**
Axe-Core (ADR replicator)	10.4
State Street Bank (Index)	10.3
County NatWest (Act./passive)	10.1
John Hancock (Index)	10.0
Prudential Diversified Invst.	10.0
Oeschle Int'l (Core plus)	9.4
IDS Int'l (Act./passive)	9.3
Oechsle Int'l (Core)	8.9
Provident Capital (Low p/e)	8.8
Ivory & Sime Int'l (5)	8.6
Martin Currie (B)	8.5
Baring Int'l (Act./passive)	8.4
Boston Int'l (Prime)	8.2
Pictet Int'l (Pos. value con.)	8.1
GIM Global	8.1
CIGNA Int'l	8.0
Brinson Partners	7.9
UBS Phillips & Drew (EAFE)	7.9
Boston Int'l (GDP wtd. EAFE)	7.5
Wright Investor's Service	7.3
Wellington Trust	7.1
Capital Guardian	7.1
Rowe Price-Fleming (Disc.)	6.9
Boston Int'l (SA free GDP index)	6.9
Capital Guardian	6.9
Pictet Int'l (Pos. value uncon.)	6.8
Rowe Price-Fleming (Trp.)	6.7
AIG Global (EAFE)	6.7
Baring Int'l (1 EAFE)	6.7
Harris Invst.	6.6
J.P. Morgan Invst. (Non-U.S.)	6.4
Ivory & Sime Int'l (3)	6.2
Kleinwort Benson (ERISA)	6.1
Union Capital	6.1
Fiduciary Trust	6.1
GE Invst.	6.1

1-year returns

	%
Marvin & Palmer (Emerg. mkts.)	2.1
Murray Johnstone	1.1
CIGNA Int'l	0.2
Lazard Freres Asset	-1.1
Wellington Trust (Emerg.)	-4.1
Pictet Int'l (Pos. value uncon.)	-4.2
Horn &	-4.3
Grantham Mayo v. Otterloo (Q)	-5.2
Putnam Cos.	-5.5
Credit Suisse Asset (EAFE)	-6.0
Henderson Admin. (EAFE)	-6.4
Ivory & Sime Int'l (3)	-6.4
Fidelity Invst.	-6.6
Wright Investor's Service	-6.9
Rowe Price-Fleming (Disc.)	-7.0
Brinson Partners	-8.2
IDS Int'l (Act./passive)	-8.3
UBS Phillips & Drew (EAFE)	-8.7
Ivory & Sime Int'l (5)	-8.7
Rowe Price-Fleming (Trp.)	-8.9
Provident Capital (Low p/e)	-9.3
G.T. Capital (EAFE)	-10.0
Grantham Mayo v. Otterloo (A)	-10.0
The Pr[illegible]	-10.0
Wellington Trust	-10.7
Fiduciary Trust	-10.9
Hill Samuel Invst. Advisers	-11.0
PCM Int'l (Print 2)	-11.1
Dillon, Read Int'l (EAFE)	-11.5
Scudder Stevens & Clark	-11.6
Citicorp Invst.	-12.0
Marvin & Palmer	-12.5
Batterymarch Financial	-12.6
Lombard Odier (EAFE)	-12.6
Rowe Price-Fleming (Discov.)	-12.9
Martin Currie (B)	-12.9
J.P. Morgan Invst. (Non-U.S.)	-13.2
AIG Global (EAFE)	-13.3
Capital Guardian	-13.4
GIM Global	-13.4
J.P. Morgan Invst.	-13.5
MSCI EAFE	**-23.2**
FTA Europe & Pacific	**-23.8**

5-year returns

	%
Pictet Int'l (Pos. value uncon.)	43.1
Ivory & Sime Int'l (3)	27.2
Boston Overseas (Castegren Int'l)	24.4
Lazard Freres Asset	24.4
CIGNA Int'l	22.9
Provident Capital (Low p/e)	22.7
Grantham Mayo v. Otterloo (Q)	21.5
WorldInvest (IPEF)	20.6
Brinson Partners	20.4
Rowe Price-Fleming (Disc.)	20.4
Henderson Admin. (EAFE)	20.1
Batterymarch Financial	20.0
Oeschle Int'l (Core plus)	20.0
Murray Johnstone	19.8
Globe Finlay (EAFE)	19.8
Bankers Trust Invst.	19.7
Baring Int'l (Act./passive)	19.4
Rowe Price-Fleming (Trp.)	19.3
G.T. Capital (EAFE)	19.3
Scudder Stevens & Clark	19.0
HD Int'l	19.0
Lombard Odier Int'l (EAFE)	19.0
Marvin & Palmer	18.9
Axe-Core (ADR replicator)	18.9
Fidelity Mgmt.	18.8
FTA Europe & Pacific	**18.6**
PCM Int'l (Print 2)	18.5
Prudential Diversified Invst.	18.4
MSCI EAFE	**18.4**
Wells Fargo Invst.	18.4

10-year returns

	%
Boston Overseas (Castegren Int'l)	24.2
Oeschle Int'l (Core plus)	20.1
Baring Int'l (Act./passive)	18.7
Capital Guardian	18.2
Putnam Cos.	18.2
Bankers Trust Invst.	17.9
Baring Int'l (1 EAFE)	17.8
G.T. Capital (EAFE)	17.6
Oeschle Int'l (Core)	17.3
MSCI EAFE	**17.0**
FTA Europe & Pacific	**16.7**

Top decile PIPER + balanced/TAA funds

3-month returns

	%
Chancellor (Stockshift 200)	15.2
Chancellor (Stockshift 150)	12.5
BRS Capital (TAA)	12.4
QuantiLogic Asset (TAA)	11.2
Miller Anderson & Sherrerd	10.9
Harris Bretall Sullivan Smith (Gro.)	10.7
Cheswick Invst.	10.5
Cooke & Bieler	10.3
Fred Alger Mgmt.	10.2
Value Line	10.0
Chase Invst.	9.8
Fayez Sarofim	9.8
Montag & Caldwell	9.4
Chancellor (Assetshift 65)	9.3
Dean Invst.	9.3
Capital Mgmt.	9.2
Turner Neill Invst. (Core)	9.2
Chancellor (Assetshift 50)	9.2
Harris Assoc.	9.1

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Quantitative Fixed Income Management

1-year returns

	%
Godsey & Gibb Assoc	19.8
J&W Seligman	11.9
Chancellor (Bondshift)	10.7
Cheswick Invst.	10.7
Oxford Capital	9.9
First Asset Mgmt.	9.5
Chase Invst.	9.4
Unity Mgmt.	9.3
Wells Fargo Invst. (3-way TAA)	8.9
Cooke & Bieler	8.8
Seaboard Invst.	8.4
Smith Affiliated	8.0
Lincoln Capital	8.0
Harris Bretall Sullivan Smith (Gro.)	7.8
Penteq (Stocks/cash)	7.8
Alpha Source Asset	7.4
Pension Mgmt.	7.0
Provident Invst.	6.7
Norwest Bank	6.6

5-year returns

	%
Oxford Capital	21.8

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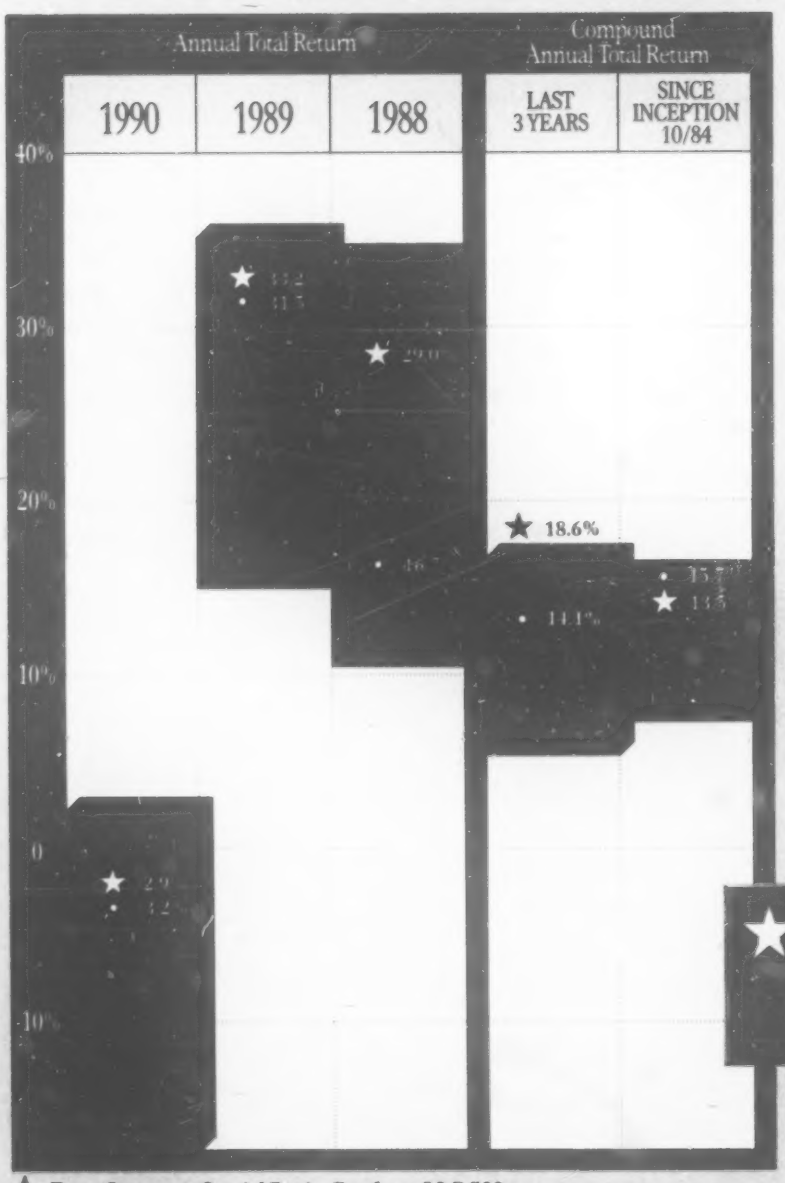

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Source: Callan Associates, Small Capitalization Equity Universe.

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Top PIPER equity funds by size

1-year returns

Over $100 million

	%
Chancellor (Growth), N.Y.	7.7
Sentry Equity (S.A. B), Wis.	7.1
CoreStates (Growth), Pa.	6.5
Chicago Title & Trust	5.0
Aetna Life (S.A. 2), Conn.	4.5
The Phoenix (Growth S), Conn.	4.0
New York Life (S.A. 1)	3.7
Provident Mutual (S.A. 1), Pa.	3.7
Aliac (Variable/total), Conn.	3.6
Fifth Third Bank, Ohio	2.3

$50 million to $100 million

	%
Commerce Bank, Mo.	5.8
Bank of New York	5.3
Lincoln Nat'l (Select), Ind.	3.5
Sentry Equity (S.A. A), Wis.	3.2
First Tennessee Invst.	2.5
Chancellor (Indexplus), N.Y.	2.0
Colorado Nat'l Bank	1.8
First Wis. (Portico inc./gro.)	0.3
First Nat'l of Omaha (D), Neb.	0.2
Chancellor (Styleshift), N.Y.	−0.2

$10 million to $50 million

	%
Minnesota Mutual (S.A. C)	36.2
Princeton Bank, N.J.	10.8
Chancellor (Sel. growth), N.Y.	7.7
Sanwa Bank (D), Calif.	5.7
NBD Trust, Ill.	5.6
Summit Trust, N.J.	5.2
Liberty Nat'l, Okla.	4.5
Commercial Capital, Ark.	4.2
First Alabama Bank (I)	4.0
First Illinois (Personal)	3.7

Under $10 million

	%
Commercial Capital (Sp. gro.)	7.7
Fifth Third Bank-Toledo, Ohio	5.4
First Nat'l of Tulsa, Okla.	4.9
American Nat'l Bank, Ind.	4.7
Shearson Trust (EF7), Del.	4.6
Norwest Bank, Minn.	4.6
Assoc. Manitowoc, Wis.	3.9
Weststar Bank, Okla.	3.7
Minnesota Mutual (Growth)	2.7
First Nat'l of Kenosha, Wis.	1.7

10-year returns

Over $100 million

	%
Sun Bank, Fla.	22.6
Provident Mutual (S.A. 1), Pa.	18.1
Merus Capital (Inc.)	17.3
First Union Nat'l, N.C.	17.2
Manufacturer Affil. (Gro.), Ill.	16.5
Manufacturers Detroit (E)	16.5
Markston Invst., N.Y.	16.3
Aliac (Variable/total), Conn.	16.0
First of America, Mich.	15.8
Union Labor Life (S.A. A), D.C.	15.7

$50 million to $100 million

	%
U.S. Nat'l Bank, Texas	17.2
Merus Capital (Gro. plus)	16.6
First Nat'l of Omaha (D), Neb.	16.3
First Wis.(Portico inc./gro.)	16.2
Dominion Capital (Corp.), Va.	16.2
Manufacturers Life, Ontario	15.9
Colorado Nat'l	15.7
Connecticut Mutual	15.7
AmSouth, Ala.	15.5
Dauphin Deposit (Corp.), Pa.	15.2

$10 million to $50 million

	%
Pacific Financial (Cap. appr.)	20.3
First Nat'l Amarillo, Texas	17.2
First Fidelity (Sel. value), N.J.	17.1
First NH Invst. (A)	16.8
Minnesota Mutual (S.A. C)	16.1
Lake Shore Nat'l, Ill.	15.8
First Security Nat'l (D), Ky.	15.7
Pacific Financial (Div. low p/e)	15.7
Guardian Ins. (V.A. 1), N.Y.	15.5
First Alabama (I)	15.5

Under $10 million

	%
Assoc. Manitowoc, Wis.	16.0
Wheeling Dollar Bank, W. Va.	15.0
Second Nat'l Bank (Gro.), Ohio	14.6
State Street Bank (S&P 500)	14.0
Bank of Delaware (VIP)	13.8
Weststar Bank, Okla.	12.9
American Nat'l Bank, Ind.	12.6

Chancellor (Stockshift 200)	18.3
First Quadrant (Tactical returns)	17.8
QuantiLogic Asset (TAA)	17.5
Institutional Capital	16.6
Seaboard Invst.	16.6
Jurika & Voyles	16.1
Bankers Trust Invst. (Act. TAA)	15.6
Invst. Counselors	15.5
Turner Neill Invst. (Core)	15.5
Fox Asset Mgmt.	15.2
Fayez Sarofim	15.2
Provident Invst.	15.1
Godsey & Gibb	15.1
Dolan Capital	15.1
Dean Invst.	14.9
TSA Capital (TAA)	14.7
J&W Seligman	14.7

10-year returns

	%
First Quadrant (Tactical returns)	21.1
Rightime Econometrics (3-way)	19.5
Penteq (Stocks/cash)	19.4
BRS Capital (TAA)	18.7
Wells Fargo Invst. (3-way TAA)	18.4
First Bank Milwaukee	18.2
TSA Capital (TAA)	17.7
Chancellor (Assetshift 65)	17.7
Dolan Capital	17.6
Mellon Capital (3-way asset)	17.5
Dean Invst.	17.3
J.P. Morgan Invst. (TAA)	17.2

What does the future hold for GICs? *P&I* examines the guaranteed investment industry in the March 18 issue.

Specialty

Continued from page 19

gional malls, said Phillip Stephens, executive vice president with Equitable Real Estate.

Boston-based State Street Bank & Trust Co.'s $47 million AEW/State Street Real Estate I fund returned 13.9%, ranking fourth among closed-end funds. About 90 basis points of the portfolio's return came from cash, said Robert E. Kilroy, a vice president with State Street.

The Institutional Mortgage Fund II of Invesco Realty Advisors, Dallas, ranked fifth in the closed-end category with 13.3%.

The $29 million fund invests in participating mortgages. Gia Alessandra, assistant vice president at Invesco, said 8.1 percentage points of the fund's return was attributable to income.

Citicorp Real Estate Investment Management, New York, had the second-best performing open-end fund during the one-year period; it's Real Estate fund returned 10.7%.

Prudential Real Estate Investors, Newark, N.J., had open-end funds ranking third, fourth and fifth for the year.

Prudential's Union Mortgage Account, which has $138 million in fixed mortgages, was third with 9.1%.

All of the return came from income, said Kevin R. Smith, director and general manager with Prudential Realty.

Prudential's $800 million PRISA II returned 8.8% for the year, ranking fourth. Charles Lightner, a senior vice president with Prudential, said almost all of the return came from cash, but a 700,000-square-foot Jersey City, N.J., office building, Exchange Place, purchased at the end of 1989 also appreciated sharply.

The fifth-placed fund, the $3.25 billion PRISA I portfolio, returned 8.1%. PRISA I has completed its two-year restructuring and sold off its smaller properties, said Mr. Lightner. Cash accounted for about six percentage points of PRISA I's return.

The PIPER report is compiled by Rogers, Casey & Associates, Darien, Conn. ■

PIPER+ global funds

	Periods ended Dec. 31				
	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	9.90	-0.38	15.06	23.59	20.28
First quartile	7.22	-6.96	11.60	16.95	17.73
Median	5.74	-10.50	9.21	14.59	15.77
Third quartile	4.57	-13.72	7.41	12.33	14.40
Lowest return	-11.06	-34.19	-0.18	5.49	12.59
FTA World	10.54	-17.06	6.65	15.32	13.24
MSCI World	9.84	-16.52	6.64	15.12	14.93

PIPER+ international funds

	Periods ended Dec. 31				
	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	14.10	2.05	19.92	43.09	24.19
First quartile	8.04	-8.98	10.48	19.78	18.18
Median	6.10	-13.50	7.30	18.35	17.04
Third quartile	4.68	-17.12	4.88	16.43	14.56
Lowest return	-0.93	-29.47	1.46	8.32	9.81
FTA Europe Pacific	11.64	-23.84	2.92	18.55	16.69
MSCI EAFE	10.63	-23.20	3.05	18.36	16.99

PIPER+ balanced/TAA funds

	Periods ended Dec. 31				
	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	15.22	19.81	20.45	21.77	21.07
First quartile	7.76	4.73	12.76	12.98	15.22
Median	6.70	2.70	11.67	11.78	14.16
Third quartile	5.80	0.43	10.50	10.62	13.21
Lowest return	1.62	-12.58	3.36	5.08	10.48

Graphic by John J. Bohorquez

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New Issue *February 11, 1991*

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Freddie Mac

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"TRAINs" (Total Return Adjustable Index Notes) "I-TRAINs" (Inverse Total Return Adjustable Index Notes)

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Series 1042-A (TRAINs)	$250,000,000	(3)	February 15, 2021
Series 1042-B (I-TRAINs)	$250,000,000	(3)	February 15, 2021

(1) Subject to increase as provided in the Offering Circular.
(2) Determined as described in the Offering Circular.
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Lehman Brothers

Former SEI exec joins adviser

NEW YORK — William R. Bullion, former executive vice president and general manager of pension consulting at SEI Corp., Wayne, Pa., has joined Schaenen Wood & Associates Inc., New York, as executive vice president and director of marketing. He is also a member of the investment policy committee.

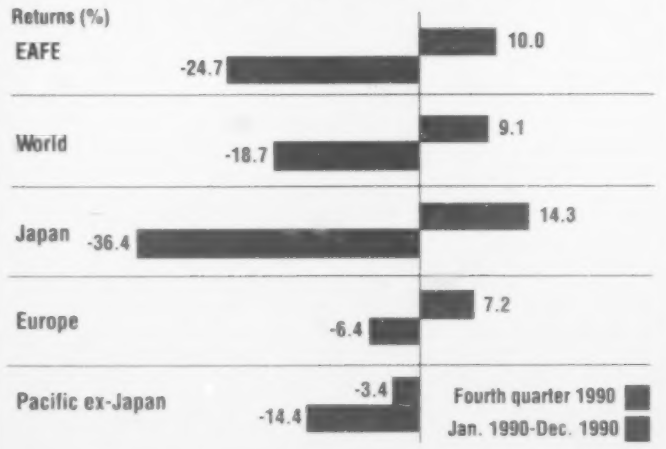
Michael Schaenen, chairman of the firm — which has almost $1 billion under management, two-thirds of it for tax-exempt clients — said Mr. Bullion "takes us to another plateau in the evolution of the firm."

Mr. Schaenen said the firm was not at the size needed to be accepted as a factor in the large plan market.

Mr. Bullion, he said, brings a knowledge of investment management consultants and large plan sponsors, and how to talk to both groups. He also would add a level of management depth for the firm to plan for its future growth.

Mr. Bullion, who spent 15 years at SEI and the firm it acquired — A.G. Becker Funds Evaluation — said Schaenen Wood had an excellent long-term track record as a conservative value-oriented investment management firm but had never made a significant effort to market itself to sponsors of large plans. ■

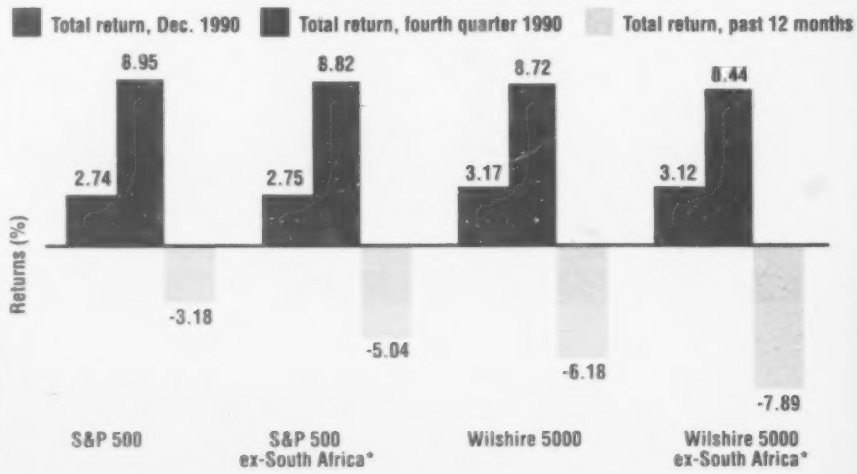
Morgan Stanley Capital International worldwide indexes



Source: Morgan Stanley Capital International, New York
Indexes are in U.S. dollar terms without dividends re-invested

Graphic by Holly Seguine

The South Africa Free Index



*Excludes stock of companies with an equity stake in a South Africa business, no replacements.

Source: Wilshire Associates, Santa Monica, Calif.

Graphic by Holly Seguine

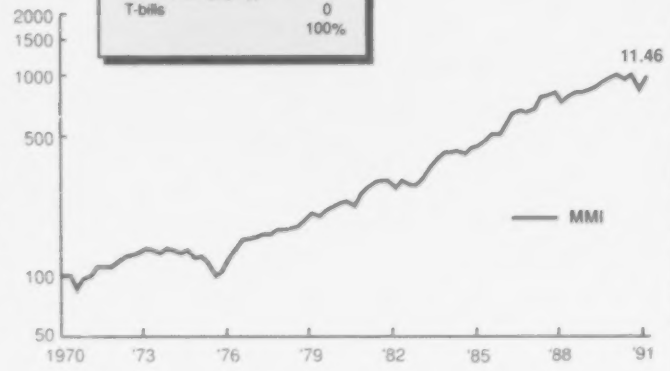
Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.

Weights

Large-cap stocks	28%
Small-cap stocks	12
International stocks	15
Venture capital	5
Domestic bonds	18
International $ bonds	2
Non-dollar bonds	5
Real estate (equity)	15
T-bills	0
	100%

Five-year annualized return 11.68%
One-year return -2.60%
Latest quarter 6.92%



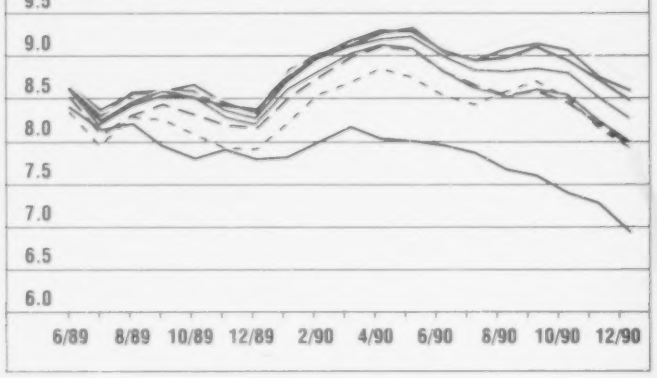
12/31/69 = 100
Data through 12/31/90

Source: Brinson Partners Inc., Chicago

Graphic by Holly Seguine

Summary of average GIC & BIC data vs. Treasury yields

(Bullet, compound $1 million contract)



3-year GIC
5-year GIC
7-year GIC
91-day T-bill
6-year Treasury
3-year BIC
5-year BIC
7-year BIC

Source: William M. Mercer Asset Planning Inc

Graphic by Holly Seguine

Fourth quarter 1990 returns

	Russell 3000®	Russell 1000®	Russell 1000® by market capitalization: Large	Medium/large	Medium	Medium/small	Russell 2000®
Technology	10.04%	9.94%	5.22%	23.33%	9.03%	15.25%	11.54%
Health care	15.19	14.80	14.13	10.44	18.51	26.78	21.46
Consumer discretionary	12.52	13.41	8.64	14.81	16.85	10.46	1.95
Consumer staples	14.56	14.64	15.93	14.35	8.71	11.19	8.98
Integrated oils	-1.46	-1.48	-0.59	-7.48	-13.91	3.29	7.64
Other energy	-8.91	-8.31	0.00	-6.77	-9.23	-12.62	-15.15
Materials and processing	9.93	10.87	14.94	10.40	11.38	6.74	0.98
Producer durables	8.18	8.31	6.64	7.88	10.58	12.30	6.75
Auto and transportation	4.19	4.21	-6.51	12.97	11.13	5.75	3.57
Financial services	12.90	13.55	12.05	17.63	11.63	9.41	1.84
Utilities	9.07	9.16	4.88	13.55	14.03	9.62	5.14
Total	**9.31**	**9.54**	**7.67**	**10.92**	**11.68**	**10.16**	**5.03**

Source: Frank Russell Co., Tacoma, Washington

Proxies

Continued from page 1

by members of the Council of Institutional Investors as well as the New York State and Local Retirement Systems, Albany.

The proposals are an attempt to take the most direct route possible toward assuring long-term corporate performance and accountability, shareholders and investor groups said.

"Rather than concentrate on independent features of corporate governance such as poison pills, golden parachutes, staggered boards and confidential voting, what (institutional shareholders) really are after is independent, responsive, accountable boards of directors, and they feel this is the way to achieve it," said Peg O'Hara, director of the corporate governance service at the Investor Responsibility Research Center, Washington.

Half of the proposals are the result of a united effort by members of the Council of Institutional Investors, Washington, that focused on promoting independence in the boardroom and on the committees that nominate directors.

"It is the core function of the core mechanism that shareholders have for overseeing their property," said Sarah A.B. Teslik, executive director of the council, which developed its own working definition of director independence that its members have used in their proposals.

Council members that filed resolutions include the Florida State Board of Administration, Tallahassee, which has a proposal at Dow Chemical; the United Brotherhood of Carpenters and Joiners of America, which is assisting two regional pension funds sponsor resolutions at Waste Management and Dillard; and the AFL-CIO, which is assisting two union members employed by the Tribune who have sent off proposals.

The New York State & Local fund, while not a member of the council, has proposals using a similar definition of director independence pending at Charming Shoppes, Intergraph, National Semiconductor and Occidental.

The fund recently withdrew a resolution it had at Witco Corp., New York, after the company satisfied the fund that its board was independent.

Corporate governance "is not just a phenomenon that's just a passing concern pursued by flaky shareholders," Ms. Teslik said. "It really is becoming focused on a smaller and smaller number of issues by a larger and larger group of shareholders."

Under the council's definition, an independent director is someone who: "has not been employed by the corporation or an affiliate in an executive capacity within the last five years; is not an employee or owner of a firm that is one of the corporation's paid advisers or consultants; is not employed by a significant customer or supplier; has no personal services contract with the corporation; is not employed by a foundation or university that receives significant grants or endowments from the corporation; (and) is not a relative of the management of the corporation."

Just last month, General Motors Corp. amended its corporate bylaws formalizing its policy on director independence in response to a proposal put forth by the California Public Employees' Retirement System, Sacramento. The pension fund used the council's definition of independence.

While some say GM's action might have given momentum to the movement for independent boards, many view the gesture as largely symbolic and say the real battle has only just begun.

"A lot of corporations will see it as a significant but largely symbolic victory," said Howard D. Sherman, vice president of Institutional Shareholder Services Inc., Washington. "The real energy will come when a proposal like this one is submitted for a vote. We have to see what kind of support it wins from shareholders."

Of the four companies now waiting to hear from the SEC as to whether they may omit the shareholder proposals from their proxy statements, Waste Management is likely to hear first, based on the SEC's 45-day turnaround schedule. The SEC received Waste Management's request Jan. 2.

The proposal filed by the carpenters union fund was prompted by concern over problems Waste Management has had, and a belief that future problems could be avoided if the company had a more independent board, said Ed Durkin, director of special programs at the United Brotherhood of Carpenters and Joiners of America, Washington.

The union's funds hold 1,068,756 shares of the company, Mr. Durkin said. There were 487,104,888 shares outstanding as of Oct. 31, he said.

Mr. Durkin pointed to a lawsuit against the company charging price-fixing for container refuse service as an example of "one of the problems Waste Management has had lately that might be helped if there was an independent board overseeing management."

In November, the company agreed to pay $19.5 million to settle the lawsuit but made no admission of any wrongdoing.

"The composition of the board, if you look at the individuals, is dramatically non-independent," he said. "We think it's critically important that the majority of any corporate board has no personal or financial ties to the company."

Eight of Waste Management's 11 company directors would be considered non-independent as they are employed as company executives or have a business relationship with the company, Mr. Durkin said.

"If you have a board that's independent of management, I think the shareholders have a better probability of getting the kinds of decision-making that will assure the long-term viability of the company," Mr. Durkin said.

But officials at Waste Management disagree. They have written two letters to the SEC arguing, among other things, the proposal would conflict with provisions of both Delaware corporate law — under which the company is incorporated.

"At the end of the day, I don't think that an inflexible definition of independence and an inflexible rule . . . is appropriate," said Herbert A. Getz, vice president, secretary and assistant general counsel at Waste Management.

"People should be voting for the boards of directors based on results."

Under the definition as outlined in the resolution, "Essentially anybody who transacts any business with the company . . . regardless of the materiality of that relationship, is not independent," Mr. Getz said. "Our position is that we have an independent board in the classical sense."

Last November's settlement, Mr. Getz said, "really was a decision to limit the company's exposure to the risk of a jury trial."

The proposal at Dow Chemical is similarly targeted at the board's insider makeup, said Luther Jones, manager of corporate affairs at the Florida State Board, which is sponsoring the proposal. The fund owned 441,227 shares of Dow Chemical as of Nov. 9. Dow had 269,990,435 shares outstanding at year end.

"Even though they may not have been appointed to the board by the chief executive officer, they may have had very close ties to the CEO," Mr. Jones said.

Officials at Dow Chemical, who were not available for comment, wrote to the SEC Jan. 7 that the proposal would conflict with Delaware law and the company's certificate of incorporation.

While one proposal at the Tribune addresses the issue of having an independent majority on the board, a separate proposal advocates the company's director nominating committee be composed of independent directors.

"The typical thing is that the nominating committee will be chaired by an insider, in which case, they can help control who the directors will be," said Michael Calabrese, an attorney representing the AFL-CIO on the Council of Institutional Investors, which is assisting the sponsors of both proposals.

The Tribune has challenged only the proposal to have a majority of independent directors on the board, Mr. Calabrese said. ■

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Scramble

Continued from page 2

ship and record-keeping business for Chicago-based Amoco Corp.'s $2.5 billion defined contribution plans, offering what John Rynne, Amoco's director of qualified benefits plans, said was greater flexibility than the mutual fund companies.

"We designed the plan, and didn't have to design the plan to meet their record-keeping abilities," he said. "We didn't find (the mutual fund companies) were that flexible. Some told us we must offer their funds."

Third-party providers, like SEI Corp., Wayne, Pa., also are in the hunt, and often provide systems used by consultants and brokers. This past summer, SEI teamed up with Charles Schwab & Co. Inc., to provide record-keeping and other defined contribution services, including investment choices from Schwab's brokered mutual funds, to the estimated $150 billion middle market.

The ability of banks like State Street and traditional powerhouse Bankers Trust Co. to continue to deliver quality defined contribution record keeping is good news for the banking industry, which has been stung by the high cost of system development and inability to keep qualified employees. Many banks, including Chicago giants Continental Bank and Northern Trust Co., have abandoned the field.

"We were faced with having to continually invest in the business to keep it state-of-the-art," said Northern Trust spokesman Thomas Kiman. "We just didn't have the book of business to make it worthwhile."

But by concentrating on personnel development, Boatmen's Trust Co., St. Louis, has been able to maintain an active service to its 100 record-keeping clients.

"It has become a very complex, dynamic process that requires more than unsophisticated clerks to process. We've kept up in terms of systems and the technical expertise of staff," said Lyle Brizendine, Boatmen's senior vice president in pension administration,

Another strength banks offer is as custodians of assets and in broader record-keeping and evaluation services. Banks can give a picture of the entire plan's status, not just concentrate on individual participants, he said.

In choosing State Street for record-keeping and trustee services, Mr. Rynne said Amoco wanted to "get as close as possible" to having all of its defined contribution services in one place.

One-stop shopping has been a keen selling point for the mutual fund companies; by pricing record-keeping services as a loss-leader or a break-even business, the firms could get a foot in the door to provide the investment vehicles.

And mutual fund record-keeping providers are not necessarily limited to their own products; Bob Reynolds, president of Fidelity Institutional Retirement Service Co., said about 5% of the firm's more than 400 clients use investment vehicles other than the Fidelity mutual funds.

Charles Salisbury, managing director of T. Rowe Price Associates Inc., said his firm offers selected options other than its own mutual funds for its $2 billion in defined contribution assets.

"It's gone beyond one-stop shopping," he said. "This isn't just another line of business for us. It's a major growth area."

But insurance companies and benefit consulting firms are not about to concede growth to the mutual fund companies. "We see more companies that are running a defined contribution business as a business unto itself," said Steve Benson, vice president and director of sales for Prudential Asset Management Co., Moosic, Pa.

Consultants say their ability to serve as a multipurpose adviser and to customize systems to meet individual record-keeping needs puts them in an enviable position.

"We tailor our services and that minimizes the differences between us and one-stop shopping," said Lou Valentino, manager of defined contribution practice for the New York region of The Wyatt Co.

"We view record keeping as a for-profit business," said Jane Palmer, principal at TPF&C, Chicago, which has 125 record-keeping clients. "Everything we offer is custom-programmed to calculate matching contributions, provide discrimination testing and other services."

Stan Lewkowicz, national manager of defined contribution administration in Chicago for A. Foster Higgins & Co. Inc., says the touted mutual fund company's ability to provide daily valuations to plan participants may be less than it's cracked up to be.

"Daily valuation is not just an accounting process," he said. "If we are just talking about daily transfers for plan participants, in many cases it can hurt you. A number of studies have shown small investors historically tend to buy and sell at the wrong time. Seventy percent to 80% of all participants make a choice and stick to it for a long time."

He said the advantages of daily valuation also should bring advantages to plan sponsors, like in loans, payroll deductions, discrimination testing and other key administrative issues.

"Record keeping is the only means the plan sponsors have of ensuring all their plan assets are properly accounted for," he said. "What we are talking about is a lot of money."

And money, after all, is the key, said Fidelity's Mr. Reynolds. He said the advantages of timely information and services can help the plan participants overcome the historic conservatism associated with participant's predominant choice of insurance and bank contracts.

"The needs of the future involve more information to the plan participants," he said. "If you provide to the participant the ability to switch on a timely basis, they will have a more aggressive, healthy asset mix." ■

Financing and investing in emerging markets will be spotlighted March 4.

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March 4, 1991

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AT DEADLINE

NYC Employees' hikes rate

The board of trustees of the New York City Employees' Retirement System approved a measure to increase to 9% from 8.25% the interest rate assumption of the fund.

The actuarial change could result in an annual savings of $200 million in city pension contributions, according to Elizabeth Holtzman, the city's comptroller.

The change must be approved by the state Legislature.

The state of Pennsylvania reportedly is reviewing its contributions to the Public School Employes' Retirement System.

Fotex markets offering

Fotex, a Hungarian photo processing company, is in the market with a $50 million depository share offering, a portion of which will be privately placed with U.S. institutional investors under the Securities and Exchange Commission's rule 144A.

The proceeds of the transaction will be used for the purpose of acquiring specialty retailing companies.

Salomon Brothers Inc. is the manager for the issue.

CBOE broadens listings

The Chicago Board Options Exchange plans to list options on three foreign stock indexes, under

Continued on page 35

INSIDE

Illustration by Douglas Klauba

First impressions deceive

The wizardry of the 1990 budget reconciliation act, with provisions supposedly aimed at better securing employee benefits, actually could prove detrimental to the plans in the long run. In Commentary, Page 16.

Economy may win in Gulf war

AP Wide World Photos

The success of coalition forces in the Persian Gulf should spur an economic boom in the United States.

By Barry B. Burr and Marlene Givant Star

The Allied victory in the Gulf war also might be a victory for the economy, but it won't necessarily boost investor enthusiasm.

The end of the war could speed up a U.S. economic recovery by boosting consumer confidence and business activity, according to many, but not all, analysts and economists interviewed last week.

The success of the U.S.-led coalition in defeating Iraq has created a euphoria in the economy, evident in the rally in the stock market since the start of the air campaign Jan. 16.

But experts differ on whether the market boom will outlast the war.

The war's end is going to be a "definite plus" for the economy, said Robert Dederick, executive vice president and chief economist at Northern Trust Co., Chicago.

"It means oil prices will stay low and drop from current levels

See **Victory** *on page 33*

Pension funds cut allocations to realty

Fixed income benefits from asset shifts

By Steve Hemmerick

Avon Products Inc.'s pension fund is liquidating its real estate investments while other funds are reducing or considering reducing their realty allocations.

The reasons, according to consultants and pension executives, are unanticipated higher volatility and lower returns in some sectors of real estate.

While executives for a few pension funds already have begun a liquidation or reduction, more pension funds might follow their lead as consultants revise asset allocation studies and rethink their volatility and return assumptions about real estate.

The recent allocation change is unlike previous withdrawals of some pension funds from open-end real estate funds. Plan sponsors involved are not planning to put the money into other forms of real estate, such as direct investments, but to channel the money into other asset classes.

The falling real estate market has prompted trustees for the $408 million pension fund of Avon, New York, to begin to liquidate the fund's real estate investments.

Elio Parroni, director of trust investments for Avon, said he has asked for withdrawal of $22 million from an open-end fund with J.P. Morgan Investment Management, New York, and $7 million from an open-end fund with Wachovia Real Estate Fund, Winston-Salem, N.C.

Avon trustees also are searching for buyers for their $10 million interest in Copley Institutional Investors Fund II and $7.5 million investment in an Equitable timber real estate fund. Mr. Parroni said Avon wants to put the money in bonds.

Trustees for the $3.4 billion pension fund at Xerox Corp., Stamford, Conn., have decided to passively reduce their investment in real estate to 7% from 10% of assets, said Gerard J. Paolini, manager for trust investment strategy.

That reduction will come from the maturation of some closed-end real estate funds, and the percentage growth in other asset classes achieved in part by not putting more money in real estate.

In explaining the decision, Mr. Paolini pointed to the nearly 20% vacancy rate in office properties, the relatively poor five-year outlook for real estate and the relatively high fees paid to real estate managers.

He also said he believes there are better opportunities in other market sectors, such as in private placements investments.

Pension trustees at the New

See **Reality** *on page 35*

Photo by Margaret Price

Hungarian people must cope with high inflation and a devalued currency as the economy sheds the vestiges of Communist rule.

Pitfalls are plentiful in Hungarian market

By Margaret Price

BUDAPEST, Hungary — If the stock price of IBUSZ, Hungary's largest tourist agency, is any barometer for Hungary's overall economic health, investors have good reason to beware of this emerging market.

Special report on the world's emerging markets. Page 21.

In June, IBUSZ became the first stock floated on the reopened Budapest Stock Exchange. After an early rally, the price sits below its new-issue level. And, overall trading on the almost 9-month-old exchange, reopened last year after 42 years, remains quiet, with few investors to be found.

This picture is a far cry from the widespread ebullience that greeted Hungary's end to communism. In October 1989, the country adopted a new constitution. Last spring, the country held free elections and formed a coalition government.

See **Hungary** *on page 31*

NEWS DIGEST

AP/Wide World Photos

Thailand, where preparations for the 200th anniversary of Bangkok's founding are under way, is among the Far East countries drawing attention from institutional investors. Page 21.

Sponsors, managers and consultants, awaiting the Labor Department's 404(c) proposal, are attempting to assess the impact of the new regulations. Page 6.

The Bush administration's proposed banking system overhaul leaves industrial companies uninspired. Page 20.

***P&I* announces the Efficient Index** will become a regular feature of the Statistically Speaking page. Page 28.

SPECIAL REPORT: EMERGING MARKETS

Scanning the globe for lucrative opportunities, especially in the Far East and Latin America, investors and other institutions are exploring the world's developing markets. Page 21.

FINANCING

Envirodyne Industries' sale-leaseback of processing equipment after its buy-out offered better terms than bank loans. Page 3.

INTERNATIONAL

The economic picture in Hungary is anything but rosy, giving investors cause to approach this market with caution. Page 1.

The California Teachers' fund's plan to invest $1.5 billion overseas has managers in a scramble to meet state minority requirements. Page 4.

REAL ESTATE

Xerox, Avon and New Hampshire are among the pension funds cutting, or considering a reduction, in their real estate holdings. Page 1.

Purchasing 20% of Catellus Development was not the bad investment described by a state legislator, California Public Employees' fund officials contend. Page 27.

DEPARTMENTS

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Money manager survey due

Questionnaires for *Pensions & Investments'* annual survey of the largest institutional investment management firms are in the mail. In order for your firm to be included in the May 20 special issue, completed forms must be returned by March 18. If you have not yet received a questionnaire and wish to receive one, contact Christine Philip, directory coordinator, at (312) 649-5217.

Safeguarding participants

SEC eyes defined contribution plans

By Joel Chernoff

WASHINGTON — Staff of the SEC's division of investment management is exploring whether plan participants — particularly those in rapidly growing defined contribution plans — receive adequate protection under the private pension law and other regulations.

This fresh look comes as part of the Securities and Exchange Commission's pending overhaul of the 1940 Investment Company Act, the statute governing mutual funds. The issue was raised by the Investment Company Institute, the Washington-based trade association representing mutual funds, which seeks to apply SEC regulation to competing bank and insurance company pools holding pension assets.

But Marianne K. Smythe, the new director of the SEC's investment management division, warns the staff is "very early in this particular part of the review," and has not yet discussed the matter with the Department of Labor. Still, the staff is interested in protections afforded plan participants and adequacy of disclosure on their investments, she said.

The ICI proposal would repeal exemptions in the 1940 law as well as the 1933 Securities Act that remove bank and insurance company collective funds from SEC regulation. It has elicited howls of protest from bankers and insurance company officials. Insurance company separate accounts basically are exempted under the same provision.

The ICI wants to impose SEC rules on bank and insurance company pools "as a barrier to competition," said Carl Wilkerson, senior counsel, American Council of Life Insurance, Washington. "It's a lot of hooey they're putting in there about consumer protection and conflicts of interest."

The issue has created "an unholy alliance" between the ACLI and the American Bankers Association, two organizations whose aims often are at odds with each other, noted Kathryn McGrath, a partner with the law firm of Morgan, Lewis & Bockius, Washington, and Ms. Smythe's predecessor at the SEC.

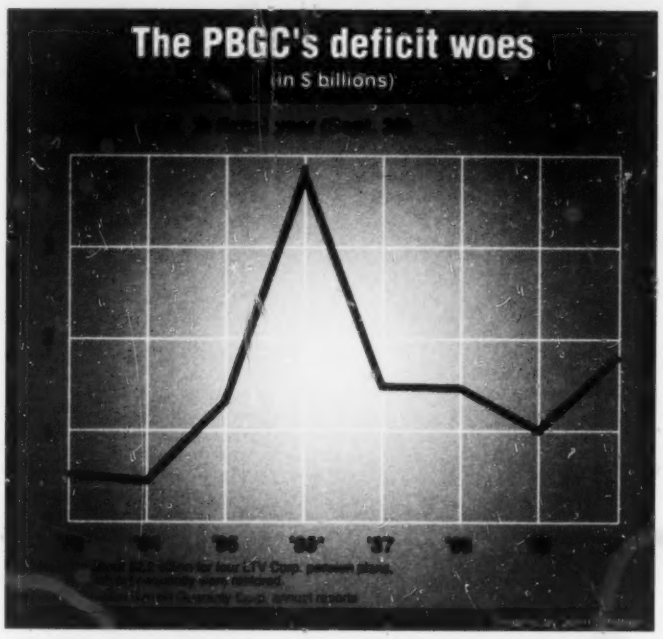
Marianne K. Smythe said the SEC is in the early stages of reviewing federal regulations.

Motivations aside, the ICI argued in a filing with the SEC that the evolving market for defined contribution plan assets requires elimination of the exemption for bank and insurance company pools.

Since 1970, the ICI asserted,

See **Review** *on page 33*

PBGC trying to shrink deficit



By Joel Chernoff

WASHINGTON — With a deficit now approaching $1.8 billion, the Pension Benefit Guaranty Corp. is focusing on three ways to shrink its future losses.

The PBGC is encouraging better funding of pension plans, by pressuring plan sponsors and their control groups and by publicizing poor funding practices.

The agency also is discouraging termination of underfunded plans, through negotiations and litigation strategies, including recent efforts to restore three terminated plans to The LTV Corp. In addition, it is maximizing recoveries from terminated plans.

"There are some very large losses out there which we have to somehow avoid," said James B. Lockhart III, PBGC executive director. "We can't see our premiums escalate year after year."

But the agency's aggressive posture has not been without controversy — particularly its efforts

See **PBGC** *on page 34*

Funds to quiz execs in takeover

By Hillary Durgin and Curtis Vosti

Institutional investors will quiz executives of AT&T and NCR about NCR's new employee stock ownership plan and potential court battle over voting rights in its takeover fight with AT&T.

The battle for control of NCR Corp. accelerated in past weeks, as the Dayton, Ohio-based company established a $500 million ESOP Feb. 21, moved up the date of its annual shareholders' meeting and sought a court ruling that would allow the ESOP's 5.5 million shares to be used in its proxy fight.

The Council of Institutional Investors, whose members are concerned about the proxy fight and the ESOP's effect on shareholder value, asked for and received a March 21 meeting with executives of the companies after NCR established the ESOP and announced its annual meeting would be March 28 instead of April 18.

The council-inspired meeting not only provides a forum for shareholders to ask questions, but also reflects corporate America's growing recognition of the stake that institutional investors have in corporate mergers and companies' long-term performance.

"We can play a valuable role in this process," said Luther Jones, manager of corporate affairs at the Florida State Board of Administration, Tallahassee. "I really think that's the key, whoever wins the proxy fight." The Florida fund, a Council of Institutional Investors member, had 3.2 million shares of AT&T and 246,944 shares of NCR as of Jan. 31. AT&T had about 1.1 billion shares outstanding and NCR, 65 million.

Any potential legal questions over the ESOP are expected to focus on voting rights and fiduciary responsibilities in voting ESOP shares in a proxy fight.

NCR's decision to establish the stock plan largely has been

See **Meeting** *on page 35*

Waiting and wondering

The gears are grinding in anticipation of 404(c) update

By Curtis Vosti

While plan sponsors, consultants and money managers await the Department of Labor's new 404(c) proposal, they are sizing up how the yet-unknown regulations might affect them.

The regulations, which would spell out how plan sponsors can escape fiduciary liability for investment decisions made by plan participants in 401(k), money-purchase and profit-sharing plans, are reportedly ready for a second go-round.

In 1987, the Department of Labor proposed 404(c) regulations that narrowly defined investment categories that would have to be offered, but they were hooted down by the investment community. The proposal mandated a competing product to the popular guaranteed investment contracts, prompting howls from the insurance industry that it would result in lower rates. Plan sponsors saw in the proposal that they would probably have to offer more investment options.

The proposal officially was withdrawn in 1990, but this year the Labor Department forwarded to the Office of Management and Budget a new proposal designed to meet those criticisms.

Despite the interest in the yet-unpublished proposal, consultants say they are telling clients to hold off on new options until the regulations are final. Others are telling clients the regulations will not affect them because of the other fiduciary responsibilities they must bear.

"I'm telling my clients that 404(c) in my mind is much ado about nothing," said Dano Bartolai, a partner with William M. Mercer Inc., Deerfield, Ill. Clients still are required to follow prudent, established, documented procedures, he said. "If prudently chosen, valuated and reviewed regularly, investment options won't be affected by 404(c)."

But, he says, for clients "on the fringes," who only offer company stock or GICs, there will be pressure on them to move to the mainstream and to offer other options.

The proposal's broad outline has somewhat calmed a nervous insurance industry because GICs could be used without a competing product, or as a fourth option outside the regulations.

However well-meaning the Labor Department's intent, it might yield some adverse side effects, according to James Hiner, principal at William M. Mercer Asset Planning Services Inc., Chicago.

"The important thing is that if company funds are added to meet the regs, then the GICs that are periodically negotiated and bought before then will have to be looked at because the competing options may violate some part of the contract," he said.

Unisys Corp., Blue Bell, Pa., already with six investment options, will probably not be affected by the regulations, according to Charles Service, corporate director of capital management and trust investments.

But for Phillips Petroleum Co., Bartlesville, Okla., the anticipated regulation will force the company to add to its plan's current options of company stock, a guaranteed investment product and government bonds. The regulation also will affect the company's aim for employees to have a sizable interest in company stock.

Rex Holsapple, manager of foreign exchange and investments for Phillips' $2 billion defined contribution plan, said employees hold about 24% of the firm's outstanding stock through employee stock ownership and thrift plans.

"We don't like it," Mr. Holsapple said of 404(c). "We expect we will have to adapt on fairly short notice to a way that may not be consistent with the objectives of the plan. To some extent, (adding options) will dilute that."

It wouldn't be a major undertaking to add to the choices, he said, although the firm wouldn't be particularly happy about it. The company has no plans to change right now, according to Mr. Holsapple.

"A while back, we kind of got excited about the thing, but it has kind of kept dragging on," he said. "DOL couldn't make up their minds, and we got tired of worrying about it, and decided we weren't going to worry until it was in black and white." ■

If Ben Graham Invested in Foreign Stocks...

Tweedy, Browne Company L.P., established in 1920, has consistently applied for over 30 years a business valuation approach to the management of investment portfolios of predominantly U.S. securities. Since 1984, the firm has applied the same principles of value investing to selected international equities that it has employed in the management of U.S. oriented portfolios. That approach is to purchase shares which are available in the stock market at a significant discount to business value, or what Benjamin Graham described in *Security Analysis* as intrinsic value. The application of this approach to primarily U.S. investments has produced the following results:

Year	Average total return before deducting fees	Average total return net of actual fees	Average % of portfolio invested in common stocks, not cash	Total return on common stocks alone net of actual fees	S&P 500	Value Line Composite before dividends reinvested	Consumer Price Index	U.S. Treasury Bill total return
1976	43.6%	41.3%	95.3%	43.2%	23.8%	32.2%	4.8%	5.1%
1977	29.2	27.6	93.5	29.3	-7.2	0.5	6.8	5.1
1978	21.6	20.2	92.7	21.3	6.6	4.3	9.0	7.2
1979	30.9	28.8	94.4	30.0	18.7	24.4	13.3	10.4
1980	16.5	14.9	93.8	15.3	32.5	18.3	12.4	11.2
1981	12.4	10.8	84.8	10.0	-4.9	-4.4	8.9	14.7
1982	18.4	16.7	89.4	17.4	21.5	15.3	3.9	10.5
1983	33.3	31.2	84.4	35.4	22.7	22.3	3.8	8.8
1984	18.0	15.8	83.8	17.3	6.3	-8.4	4.0	9.9
1985	31.3	28.9	72.2	38.0	31.8	20.7	3.8	7.7
1986	13.8	11.6	61.5	16.6	18.7	5.0	1.1	6.2
1987	6.6	4.2	67.6	4.5	5.3	-10.6	4.4	5.5
1988	20.4	18.1	62.8	26.5	16.6	15.4	4.4	6.4
1989	15.3	13.2	69.7	16.3	31.7	11.2	4.7	8.4
1990	-10.5	-12.3	71.2	-19.5	-3.1	-24.3	6.1	7.8
Annualized return, 15 years	19.4%	17.4%	—	19.1%	14.0%	7.0%	6.0%	8.3%

Our experience in international equities has shown that the same principles of value investing can be successfully applied outside the U.S. Over the past six years, we have developed data bases to screen foreign equities in much the same manner that we utilize screens in our domestic research. We have established working relationships with foreign investment management firms, many of whom are clients of Tweedy, Browne, and have acquired extensive knowledge of the different accounting, tax and financial practices outside the U.S. as well as the differing regulatory and competitive characteristics of businesses found in other nations.

In our opinion, the increasing globalization of stock markets, the enhancement of financial reporting requirements and the emergence of a single European market place present significant opportunities among the more than 7,000 companies outside the U.S. with publicly traded shares.

Value of $1,000,000 Invested January 1, 1976

Tweedy, Browne average portfolio as of 12/31/90	$11,073,000
Portion of Tweedy, Browne average portfolio invested in common stocks alone as of 12/31/90	$13,750,000
S&P 500 as of 12/31/90	$ 7,116,000
Value Line Composite as of 12/31/90	$ 2,772,000
Consumer Price Index as of 12/31/90	$ 2,411,000
U.S. Treasury Bills as of 12/31/90	$ 3,305,000

Tweedy, Browne Company L.P. began managing client accounts in late 1975 and early 1976. The above schedule presents the annual average investment results for all clients whose portfolios were managed by Tweedy, Browne Company L.P. consecutively from either January 1, 1976 or January 1, 1977 through December 31, 1990. Investment results have been adjusted downward to reflect advisory fees, brokerage and other commissions and other account expenses. Account returns reflect the reinvestment of all dividends and interest payments. There can be no assurance that past results will be equaled in the future. The S&P 500 is an unmanaged index which assumes the reinvestment of dividends and which is generally considered representative of U.S. large capitalization stocks. The Value Line Composite (Geometric) is an equal weighted index of approximately 1700 stocks and is considered representative of the price change of the average stock. The Consumer Price Index is not a stock index but it is generally considered indicative of the rate of inflation. U.S. Treasury Bill rate of return is generally considered indicative of a risk free rate of return because payment is guaranteed by the U.S. government.

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For further information concerning Tweedy, Browne's investment management services, call or write to any of the general partners, Christopher H. Browne, William H. Browne, James M. Clark, Jr. or John D. Spears at Tweedy, Browne Company L.P., 52 Vanderbilt Avenue, New York, NY 10017, (212) 916-0600, or simply fill out and mail the coupon.

CORRECTIONS & CLARIFICATIONS

• **J.C. Penney Co.**'s defined benefit pension plan held $53.5 million in non-investment-grade bonds as of Sept. 30. The amount was misstated in a chart in the Jan. 21 issue.

• The **Profit Sharing Research Foundation** has hired the Gallup Organization Inc. to conduct a survey of the use of lump-sum distributions. It was reported incorrectly Feb. 18 the foundation's sister organization had hired Gallup.

INVESTING

Enhanced index with fee twist proves to be big draw

■ Only a handful of investment management firms are headed by former corporate pension executives, and one of them, Advanced Investment Management, topped *Pensions & Investment*'s 1990 new business scoreboard for managers with $1 billion to $10 billion in assets.

AIM gained $1.05 billion in 1990, doubling its total assets to $2.05 billion. Almost all of the new business — $903 million — was for indexed equity products, most of it in enhanced indexed funds, and $13 million was for an indexed bond fund.

AIM is headed by J. Thomas Allen, who spent two years on the finance staff at Ford Motor Co. before joining Rockwell International where he was manager of retirement plan financing.

After three years at Rockwell, Mr. Allen joined Pittsburgh National Bank as head of the quantitative investments department within the bank's trust division.

In 1987, Mr. Allen and his group were spun off from the trust department as Advanced Investment Management with about $350 million in tax-exempt assets under management.

Mr. Allen says 1990 was a boom year because of the popularity of the enhanced index approach, and because AIM charges no fee if it fails to achieve its promised return of at least 100 basis points more than the Standard & Poor's 500 Stock Index.

J. Thomas Allen spent time at Ford Motor Co. and Rockwell International before winding up with AIM.

"A lot of sponsors feel plain-vanilla indexing has its purposes, but if they can pursue extra return in ways they can understand, it's an easy sell," he said.

Among the funds to hire AIM in 1990 were Timken Co., Unisys Corp., Minnesota Mining & Manufacturing Co. and K mart Corp.

The people behind Neuberger & Berman's global fixed-income push are India Cutler, left, Theresa Havell and Theodore Giuliano.

INTERNATIONAL

Firm taking in whole wide world

■ Neuberger & Berman is broadening its global fixed-income activity and has hired a marketer to get the word out.

The New York-based firm, which has managed global fixed-income assets on a limited basis for existing clients, now is offering a full range of global fixed-income investment services, including cash and currency management.

Theresa Havell, director of fixed income, and Theodore Giuliano, senior portfolio manager, have been developing Neuberger & Berman's global capabilities. "Our work in global fixed income is consistent with the risk-averse and value-driven strategies we use in the domestic markets," Ms. Havell said. "We'll be looking for inefficiencies created largely by currency differentials in the major world markets."

Key factors will be currency weightings, based on the trend of the U.S. dollar against other currencies; portfolio duration as determined by interest rate trends in each market; and security selection guided by relative sector values in each market.

India K. Cutler has joined the firm as director of global fixed-income marketing. Ms. Cutler was with Salomon Brothers Inc. from 1984 through 1989, including a stint as product manager of the Salomon-Russell Global Equity Index. After leaving Salomon, she was a corporate financial adviser.

BENEFITS

Survey puts numbers in perspective

■ The average long-term assumed rate of return for pension funds of Fortune 500 companies is 9.21% and the median rate is 9%, according to a survey by Hewitt Associates, Lincolnshire, Ill.

The average discount rate used by the funds was 8.62%, while the median discount rate was 8.5%.

The companies had an average annual pay increase assumption of 5.8%; the median was 6%.

The survey found that for fiscal 1989, the average company was 153% funded relative to its vested benefit obligation, while the median company was 147% funded. The average company was 142% funded relative to its accrued benefit obligation and the median company was 138% funded.

Even on a projected benefit obligation basis, the average company was 115% funded and the median company, 113%. The survey found that 75% of the companies reported assets in excess of projected benefit obligations.

Summary of survey results

Hewitt's surveys are based on pension information from the Fortune 500 companies as reported in their annual reports under the guidelines of the Financial Accounting Standards Board's Statement 87. All fiscal year ends and measurement dates have been combined.

	1989	1988	1987	1986
Average discount rate	8.62 %	8.84 %	8.82 %	8.38 %
Average long-term earnings rate	9.21	9.16	9.11	9.30
Average salary increase assumption	5.80	5.90	5.94	5.93
Average vested benefit obligation funded ratio	153	155	160	162
Average accrued benefit obligation funded ratio	142	141	144	147
Average projected benefit obligation funded ratio	115	112	114	118
Percent of companies with assets in excess of:				
Vested benefit obligation	94	90	90	92
Accrued benefit obligation	91	88	86	90
Projected benefit obligation	75	69	71	74
Companies included in survey	**392**	**398**	**364 ***	**242 ***

* A large number of companies initially adopted FASB Statement 87 in 1986, but the number of companies expanded greatly in 1987.
Source: Hewitt Associates, Lincolnshire, Ill.

Graphic by Cynthia Watson

MANAGERS

New manager gets 1st client

■ The money management firm set up by former executives of Western Reserve Capital Management Inc. has a new name and its first client.

Gulfstream Global Investors Ltd., Dallas, received an undisclosed amount of taxable assets for a global portfolio from Rosewood Corp., Dallas. Charlie Tusa, senior vice president at Rosewood, said he was impressed with the track record Gulfstream's principals racked up at Western Reserve.

Thomas Tull, Gulfstream principal, said the founders at first had in mind the name Mariner but found it was taken by a group of pooled funds offered by Marine Midland Bank.

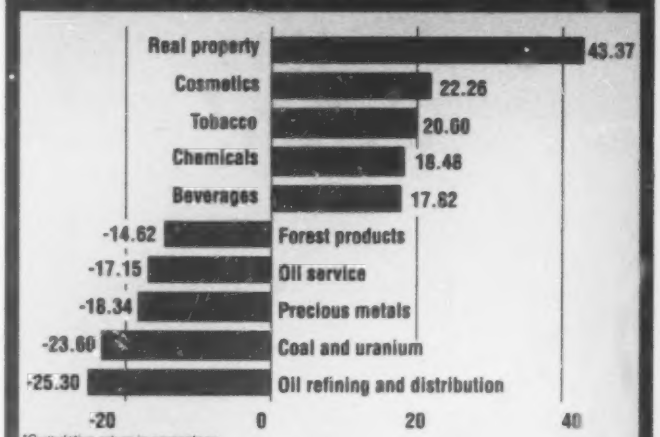
Mr. Tull previously was president of Western Reserve, the in-house investment management subsidiary of The LTV Corp. He also was director-employee benefit fund investments for LTV. Joining him as principals in Gulfstream are Stephen E. Doud and Reiner M. Triltsch, formerly vice presidents and portfolio managers at Western Reserve; and James P. Marsh, previously vice president at First Boston Corp.

Messrs. Tull, Doud and Triltsch are portfolio managers for Gulfstream, and Mr. Marsh handles marketing and client services. The firm manages global equities with an approach focused equally on country allocation and stock selection.

It has the capacity to run regional portfolios as well as across-the-board international and global accounts, and its principals have expertise in emerging markets, Mr. Tull said.

From the best to the worst

Fourth quarter S&P 500 return* attributed to industry groups



*Cumulative return in percentage.
Source: BARRA, Berkeley, Calif.

Graphic by John Smither

ADMINISTRATORS

Acquisition pushes Zenith in orbit

■ Zenith Administrators Inc. has achieved a new peak as the nation's largest third-party administrator for multiemployer benefit plans.

The Washington-based subsidiary of ULLICO Inc. has acquired Trust Fund Management Group, a Dallas-based administrator. That will add 64 accounts and five offices in the Southwest to Zenith's approximately 440 clients and 29 offices nationwide. Among the Dallas group's clients are the Houston District Council Carpenters, Pipefitters Local 211, and the Texas Ironworkers.

The acquisition, whose price was not disclosed, is the fifth in three years made by ULLICO, which has made a commitment to become a national provider of third-party services.

Gary Eng, Zenith's senior vice president and central division general manager, has been named president and chief operating officer for Trust Fund Management Group and will oversee the firm's integration into Zenith's national data network.

DEFINED CONTRIBUTION

Engineers take a calculated approach to retirement

■ Engineers have more fun — at least with defined contribution plans, according to Paul Palinski, vice president at Harris Trust and Savings Bank, Chicago.

Mr. Palinski has observed the proclivities of various plan participants through his marketing of the bank's defined contribution services and earlier, until 1987, through investing and administering the pension and profit sharing plans at then-McGraw Edison Inc.

He said engineers as a group, no matter what the firm, tend to ask more questions about their 401(k) investments. They also use the advantages of daily valuations and transfers more than the average plan participant, he said.

"They are the type of people who are very into details. They spend a lot of time examining their statements. They tend to play the market more," Mr. Palinski said.

While joshingly calling their behavior "an aberration," Mr. Palinski said he thinks there are valid reasons for the trend.

"It's their natural curiosity," he said, then added, with a laugh: "It also allows them to spend more time out of the office."

Illustration by Greg Loudon

ANALYSIS

Author stresses importance of 'economic value added'

G. Bennett Stewart advocates new measures of corporate performance.

■ G. Bennett Stewart, president of Stern Stewart & Co., a corporate financial advisory firm in New York, thinks all the traditional measures of corporate success should be discarded.

In his soon-to-be-published book, "Quest For Value," Mr. Stewart advocates doing away with the time-worn financial management systems and compensation schemes.

Mr. Stewart says earnings per share and cash flow should be replaced by "economic value added," which he defines as operating profits less the cost of capital employed to produce those earnings.

Corporate managers should be paid a share of EVA to motivate them to create value and make them think and behave more like owners. Most companies base bonuses on the attainment of planned levels of performance, Mr. Stewart says.

His firm publishes The Stern Stewart Performance 1,000, which ranks America's companies based on how well they've have added value to shareholders' investments.

The index measures the difference between a company's fair market value, as reflected primarily in its stock price, and the "economic" book value of capital employed.

Because of its focus, the performance index may appeal to institutional shareholders and others who scout for companies whose mission it is to maximize shareholder value.

The top 10 companies in the latest index, which is based on 1989 results, are, in order, **General Electric**, **Philip Morris**, **Merck**, **Bristol-Meyers Squibb**, **Coca-Cola Enterprises**, **Wal-Mart Stores**, **AT&T**, **Procter & Gamble**, **Johnson & Johnson**, and **American Home Products**.

REAL ESTATE

Dutch fund buys stake in U.S. trust

■ New Plan Realty Trust received a $67.1 million cash infusion recently when Dutch pension fund giant Algemeen Burgerlijk Pensioenfonds purchased 4 million equity shares in a private placement, according to officials with the real estate investment trust.

It is ABP's first investment in a U.S. REIT, according to New Plan Chairman William Newman. ABP has assets in excess of $100 billion.

The pension fund has committed to buy an additional 500,000 shares from the real estate investment trust — in the open market or privately if need be — bringing its total investment with New Plan to more than $75 million.

New Plan will combine the proceeds from the sale to ABP with cash from a 1989 equity issue and private placement to continue its strategy of purchasing shopping centers and apartment buildings, trust officials said. Fourteen retail properties have been purchased for a total of $25 million since the equity issue.

ABP intends to purchase the additional 500,000 shares on the open market by April 30. But if it is unable to do so, it has agreed to purchase that amount directly from the trust at $17.50 per share.

CONSULTANTS

Day breaks from SEI, joins Marco

■ Another former SEI consulting professional has joined The Marco Consulting Group, Chicago.

Ivory Day Jr., who spent 15 years with SEI Funds Evaluation Services (now SEI Capital Resources Co.) and its predecessor, A.G. Becker, has been named an account executive at Marco Consulting. The firm's president, Jack Marco, was SEI's national manager of Taft-Hartley funds evaluation services before setting up on his own in 1988; Lauma Griffin, an SEI account executive, joined Mr. Marco in the new firm.

Mr. Day was quality manager when he left SEI in 1986. He became a marketing director in Prudential Asset Management Co.'s Chicago office, the position he held until joining Marco Consulting.

The addition of Mr. Day will help Marco Consulting serve existing clients and will allow the firm to re-open its doors to new business, Mr. Marco said. The firm, which serves only Taft-Hartley funds, has as clients 45 sponsors with combined assets of more than $12 billion.

ASSOCIATIONS

NIMA selects executive director

■ The National Investment Managers Association, a group representing minority- and women-owned money management firms, has hired Lesyllee M. White as its first executive director.

Ms. White, who is based in Washington, will help establish a minority manager data base. The data base will be offered free to pension executives and investment management consultants. Managers also will be listed for free. Currently, there are about 60 minority- and women-owned firms whose investment management performance and other data are being entered into the system.

NIMA also will develop a data base for minorities seeking jobs in the investment management world. The group, which is applying for non-profit status, will not engage in lobbying, but its Washington presence will be a help in reaching influential people, NIMA officials admitted.

Opening the office in Washington also will accomplish another goal: creating a divider between NIMA and NCM Capital Management, Durham, N.C., which has been closely linked to the organization.

Ms. White also works full time as a lawyer for the Pension Rights Center, a non-profit, benefit rights group.

INVESTING

City has brotherly love, good return

■ Philadelphia is safe — for now at least — and so is one of the pension funds that helped bail the city out.

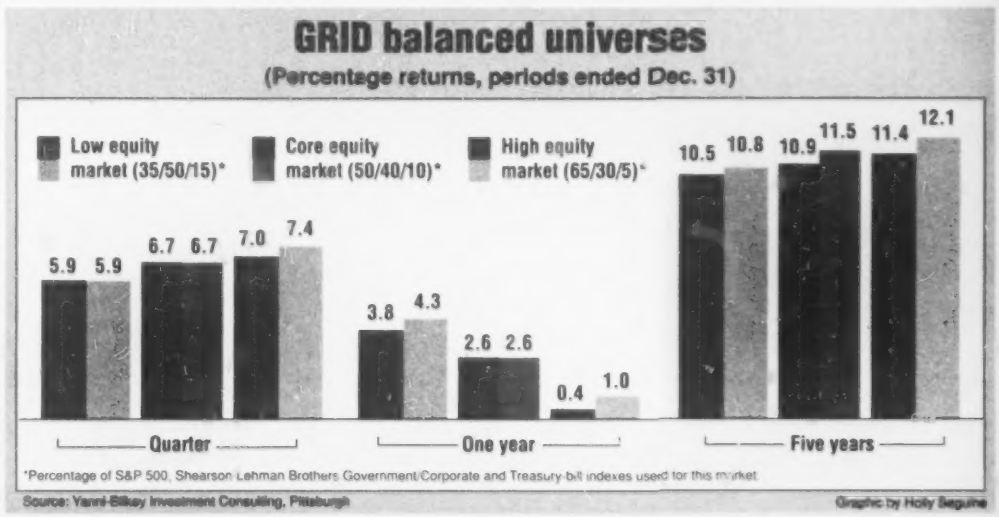
The $17.3 billion Pennsylvania Public School Employes' Retirement System already has received at least two payments on its $37.5 million loan made to Philadelphia earlier this year. Moreover, the fund is happy with the exceptional returns and special structure of the deal that was negotiated, said James A. Perry, executive director at the fund.

The pension fund expects a 26% rate of return on the loan, based on its short duration and the two points Philadelphia paid up front, Mr. Perry said.

"Because of the points and the short duration, the rate was exceptionally good," Mr. Perry said.

Special terms assured the pension fund it would get its money back, Mr. Perry said. As part of the deal, a third-party custodian bank has been delegated to intercept all the tax payments that normally would go to the city treasurer and defer them to the lenders, Mr. Perry said.

"There is someone intervening to see to it that the city pays its bills," Mr. Perry said. "We intercept their cash before they even get it," he said. And, city officials "have enough cash flow . . . to pay off these loans by the time the notes come due," he said.



Unmasking ERISA's 'protections'

By David Langer

The 1990 budget reconciliation act purports to improve employee benefits by further restricting reversions and by permitting the transfer of defined benefit assets into a 401(h) retiree medical benefit account.

But employee benefit provisions in the new law raise troubling questions about its real intent as well as the legislative system.

Do we in this day once again have taxation without representation? It seems we do when one looks at the way pension measures have come into being in recent years, frequently without adequate public hearings. Having little role to play, the benefits community has become little more than an ineffective complainer.

Consider the two most important provisions in the act dealing with reversions and retiree medical benefits.

The new, higher excise tax on reversions discourages, as probably intended, any termination of defined benefit plans having large surpluses. That may not be good public policy. Sponsors now may prefer to fund as minimally as possible, even though such a policy may impair plan solvency. Those sponsors with surpluses may want to reduce investment risk and, as a result, accept lower returns by placing more assets in Treasury securities. Sponsors with surpluses who foresee the need to terminate their plans will consider alternatives for cutting back on the surplus as much as possible before such terminations by raising benefits and by reducing any contributions.

The new excise tax, coupled with regular federal, state and local income taxes, is tantamount to confiscation of any surplus. The budget reconciliation act raised the excise tax, which was 15%, to either 20% or 50%, depending on circumstances. The total tax on reversions, including regular federal, state and local taxes, probably will range between 60% and 96%, leaving 40% to 4% for the employer.

The Employee Retirement Income Security Act of 1974 intended that any surplus revert to the sponsor. ERISA's Section 4044 (d)(1) states any surplus may be distributed to the employer upon the satisfaction of all liabilities to participants and their beneficiaries. But now the government has decided to claim the surplus. So ends the debate about who owns the surplus, neither sponsor nor employee.

The idea of transferring surplus pension assets to pay retiree medical expenses is worthy. The authors of the law, however, burden this useful and simple transfer concept with requirements of fully vesting accrued pension benefits and tricky maintenance of effort, both of which will limit interest by employers. This is puzzling because transfers raise additional current tax payments to the government.

Clearly, the success of qualified plans in improving retirement benefits of a large segment of our work force has, unfortunately, caught the eye of the prodigal government. It now appears the government, whenever it can manufacture a reason, will appropriate retirement plan assets for itself.

The marvelous apparatus that private enterprise has assembled to accumulate and disburse funds for retirement is thus being progressively undermined. The executive and legislative branches clearly have assumed a royal status for themselves by not subscribing to the same standards of conduct established by ERISA for the ordinary citizens who are plan fiduciaries.

The benefits community, which has greater practical experience operating plans, should be given legal status in the legislative and regulatory process so it can enjoy real influence. That would make for more constructive collaboration among the benefits community, Congress and its staff, the Internal Revenue Service and the departments of Labor and Treasury. ■

Illustration by Douglas Klauba

David Langer is a consulting actuary and the president of David Langer Co. Inc., New York.

LETTERS TO THE EDITOR

Defined contribution plan service providers

Dreyfus Benefits

■ Dreyfus Benefits, a division of Dreyfus Service Corp., a mutual fund and money management firm, missed your Dec. 10 directory of defined contribution plan service administrators and software providers. Dreyfus Benefits offers full trustee services. It has 587 clients. Average plan size is 500 participants; median plan size is 310. Administrative services staff totals 50.

Its record-keeping services can handle 36 contribution categories; 99 investment selections per plan; transfers and allocations among investment funds; federal and state tax withholding; loan provisions; compliance testing; comprehensive reports to plan sponsors and participants; and daily valuation of participant balances.

Administrative services provide coordination of trust and record-keeping activities; reconciliations of trust assets and participant records; filing of tax forms; support for dividend reinvestment programs; proxy voting and tabulation services; 800 numbers for participant balance inquiries and transactions; and coordination with GIC carriers.

Other services include communications programs, plan design assistance, prototype plans, telephone exchanges and broad investment services. Offices are in New York, Atlanta, Chicago, Denver, San Francisco and Los Angeles. Fees are calculated on a participant basis. Valuation frequency and/or ancillary services are determinants.

Key executives overseeing defined contribution plan administrative services are myself and Lynda J. Meyer and Paul Allen, both senior vice presidents.

Mary Rudie Barneby
President
Dreyfus Benefits Division
Dreyfus Service Corp.
New York

Crestar

■ Crestar Financial Corp. missed your defined contribution services directory.

Crestar Bank's trustee services provide settlement-date accounting for valuation of assets and securities lending support.

Record-keeping services can handle 10 contribution categories and 30 investment selections; monthly transfers are allowed among investment funds. The system offers tax withholding, loan provisions, and reports to sponsors and participants.

The administration service provides coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of necessary tax forms with government agencies; support for dividend reinvestment programs; proxy voting and tabulation services; and coordination with GIC carriers.

Forty-seven Crestar employees are involved in plan administration services.

Offices are in Richmond, Norfolk, Roanoke and Lynchburg, Va.; and Washington.

The bank buys software from an outside vendor. Fees are based on a combination of asset value and individual services.

The key executive overseeing the services is Gordon R. Boardway.

Cathy M. Carter
Assistant vice president
Crestar Financial Corp.
Richmond, Va.

Ameritrust and Ameritrust

■ In your directory of defined contribution plan service providers, Ameritrust Co. N.A. of Cleveland was omitted while our affiliate, Ameritrust Texas, was included.

The information and statistics provided by Ameritrust Texas are for our Texas offices only. An additional listing for Ameritrust Co. is needed to fully depict our defined contribution plan services.

Ameritrust, a trust company, has 244 clients. The average plan size is 665 participants. Its administrative staff is 75.

Its trustee services provide trade-date, settlement-date and tax-lot accounting for valuation of assets; multiple sources for securities pricing; daily transactions reports; and securities lending support.

Its record-keeping services handle unlimited contribution categories and unlimited investment selections; and monthly transfers and reallocations. The system provides for tax withholding; loan provisions; comprehensive reports to both sponsors and participants; and daily valuations on participant balances.

Ameritrust's administration services provide: coordination of trust and record-keeping activities; reconciliation of trust assets and participant records; filing of tax forms; support for dividend reinvestment programs; proxy voting and tabulation services; 800 numbers for participant balance inquiries and participant transactions; and coordination with GIC carriers. Ameritrust also offers 18 investment funds.

Offices are in Ohio (Cleveland, Columbus, Cincinnati); Indiana (Indianapolis, Kokomo, Elkhart); and Michigan (Sturgis). Fees are based on the number of balances, participants, valuation frequency, and frequency of participant statements.

The key executives overseeing services are: Gary W. Queen, senior vice president; George Fetko, vice president; and Peter Corrado, vice president.

Andrew L. Sikorovsky
Trust marketing analyst
Ameritrust Co.
Cleveland

IDS Trust

■ IDS Trust was missing from the Dec. 10 directory of defined contribution service providers. IDS Trust, a trust company, has 237 clients. The average plan size has 1,010 participants. Its administrative staff is 275.

Its services provide trade-date accounting for valuation of assets; multiple sources for securities pricing; and daily reports.

Its record-keeping services can handle 20 contribution categories; 20 investment selections; daily and periodic transfers and reallocations among investment funds (including daily valued GIC option and company stock); tax withholding; complete loan provisions; comprehensive monthly reports to plan sponsors and quarterly statements to participants; and daily valuation on participants' balances.

Administrative services provide coordination of trust and record-keeping activities; daily reconciliation of trust assets and participant records; support for dividend reinvestment programs; proxy voting and tabulation services; an 800 number for participant inquiries and transactions; in-house discrimination testing; and coordination with GIC carriers.

Other services include prototype plan documents; comprehensive employee communication programs; quarterly investment reviews for plan sponsors; on-line access; company stock accounting; daily value GIC fund; GIC portfolio management; and a broad range of mutual fund investments.

Software is purchased from an outside vendor; fees are based on the number of participants and plan design.

The key executives overseeing defined contribution plan administrative services are Gary Anderson, Robert Rudell and Lisa Griebel, all vice presidents.

Louise E. Nemmers
Marketing manager
IDS Trust
Minneapolis

John Hancock

■ We were omitted from your directory of defined contribution plan service providers.

John Hancock is a full-service provider of 401(k) programs. Clients can choose from a family of investment products, including stock and bond funds as well as guaranteed investment contracts. Our record-keeping services offer daily valuation, administrative flexibility to plan sponsors and comprehensive reporting to plan participants.

Also, we offer plan design and document services, employee communications and enrollment assistance, benefit payment services and annual Form 5500 preparation.

John Hancock has 12 offices throughout the country and a business unit to serve defined contribution clients and prospects.

Joseph P. LoRusso
Second vice president
Defined contribution products/services
John Hancock Mutual Life Insurance Co.
Boston

TrustMark

■ TrustMark Inc. was omitted from your defined contribution services directory.

TrustMark offers PC/LAN-based defined contribution record-keeping software products and has almost 300 installed systems.

Our software functions include check writing, loan processing, individual or pooled guaranteed investment contract tracking, eligibility and compliance testing, and performance measurement and voice response interfaces.

Hardware required is IBM compatible PC with 640K RAM and 20 MB hard drive. Price fully installed ranges from $9,500 to $60,000. Telephone assistance is available nine hours a day. Staff has 27 professionals.

Kent H. Novell
Vice president-sales and marketing
TrustMark Inc.
Charlotte, N.C.

The following firms were omitted from the directory of minority- and woman-owned financial services firms published Oct. 15.

Aquarius Capital Management
189 Canal St., Providence, R.I. 02903; (401) 274-0881

Aquarius Capital Management, founded in 1989, offers equity and fixed-income investment management.

Its equity approach is primarily value-oriented, focusing on established mid- to large-size companies with strong balance sheets, low relative p/e ratios and positive earnings growth potential. A top-down, sector-rotation methodology is used to manage portfolios. Stocks are selected from approved common stock lists quantitatively to match a client's objectives and risk tolerance.

Fixed-income accounts are actively managed stressing safety of principal by investing in U.S. government and high quality corporate bonds of primarily short to intermediate maturities.

Key professionals at the firm are Allen R. Waters, partner, with eight years of experience, and Abu R. Bakr, partner, with three years of experience.

Cadinha & Co. Inc.
900 Fort St., Suite 1240, Honolulu, Hawaii 96813; (808) 523-9488

Cadinha & Co. Inc., founded in 1979, offers investment counseling and portfolio management.

It has $290 million under management, of which $230 million is for tax-exempt clients.

Its equity approach is top-down, focusing on demonstrated growth. Interest rate anticipation is used in managing fixed-income accounts.

Key professionals at the firm are Harlan Cadinha, president, with 23 years of experience; Leon Munson, vice president, with 26 years; and Janis Akuna, vice president, with 13 years of experience.

Capital Insight Brokerage
190 N. Canon Drive, Suite 200, Beverly Hills, Calif. 90210; (213) 858-5165

Capital Insight Brokerage, founded in 1987, offers full broker dealer services.

Its areas of expertise in investment banking are co-managing municipal bond underwritings and equity research specializing in small-cap situations.

Special brokerage services offered by the firm include being members of Instinet; floor brokers strategically located on the major exchanges which ensures confidential execution of block trades; and night trading in Japan and London for U.S. Treasury bonds, futures, options and foreign currencies.

Key professionals at the firm are Marilyn Cohen, president, with 15 years of experience; Jene Alexander, head equity trader, with 23 years; and Brian McDonald, head trader-fixed-income, with eight years of experience.

Clemente Capital Inc.
767 Third Ave., New York, N.Y. 10017; (212) 759-3339

Clemente Capital Inc., founded in 1979, offers investment advisory management services.

It has $300 million in discretionary assets under management, of which $28.8 million is for tax-exempt clients. The firm also acts as adviser to $7 billion in Japan.

The firm is an active equity manager, taking a growth-oriented, top-down approached combined with bottom-up fundamental research. For fixed-income accounts, the firm is an active, total return manager. Using a world economic outlook, the firm assesses potential returns, then focuses on country selection, issue and currency considerations. Global cash services also are offered, stressing high income, active currency management.

The firm offers consulting services on global asset allocation.

Key professionals at the firm are Lilia C. Clemente, chief executive officer/global strategist, with 22 years of experience; Leopoldo M. Clemente, president, with 24 years of experience; and Thomas Prapas, chief economist, with 25 years of experience.

Galleon Capital Management
1527 Calle Tulipanes, Encinitas, Calif. 92024; (619) 943-1620

Galleon Capital Management, founded in 1990, offers domestic and international equities and fixed-income management.

Its equity approach is value oriented, using quantitative and fundamental analysis to select undervalued equities. Valuation estimates are derived from the cash earnings generated from operations and nets out all transitory and non-cash expenses. For fixed-income accounts, it uses proprietary quantitative methods.

Consulting services offered by the firm are geared toward domestic and international equities and fixed income.

Key professionals at the firm are Louis Acevedo, president, with eight years of experience; William Roach, vice president, with five years; and Gary Johnson, vice president, with 20 years.

The case for in-house management will be discussed in the June 10 issue.

GW Capital Inc.
10800 N.E. Eighth St., Suite 315, Bellevue, Wash. 98004; (206) 646-9336

GW Capital Inc., founded in 1989, offers equity, convertible bond, fixed-income and balanced management.

It has $25 million under management, all of which is for tax-exempt clients.

Its equity approach uses a combination of analytical and technical research to construct a list of companies. By using top-down analysis of business and economic cycles, a primary consideration in selecting stocks is companies having earnings and assets not yet reflected in their market price. For fixed-income accounts, decisions are based on a thorough examination of the interest rate cycle and its relationship to the business cycle and economic outlook.

The key professional at the firm is Guy Watanabe, president, with 15 years of experience.

Hanover Capital Asset Management Inc.
90 West St., Suite 608, New York, N.Y. 10006; (212) 732-4272

Hanover Capital Asset Management Inc., founded in 1990, offers active fixed-income management and financial advisory services.

It has $20 million under management, none of which is for tax-exempt clients.

The firm invests primarily in mortgage-backed securities using quantitative techniques to meet or exceed client-specified benchmarks. It uses a modified buy-and-hold approach, selecting bonds for their fundamental value. Fundamental investment principles are coupled with quantitative analysis.

Its areas of expertise in investment banking are financial advisory, mortgage derivatives and securitization.

The firm offers asset/liability management consulting services.

Key professionals at the firm are Marilyn J. Dicks, president and chief executive officer, with 12 years of experience; Inna N. Tavares, managing director, with six years; and Joyce S. Mizerak, vice president, with five years.

INNOVA Securities Inc.
290 Westminster St., Providence, R.I. 02903; (401) 521-0390

INNOVA Securities Inc., founded in 1990 as a joint venture with Mutual Benefit Life, offers brokerage and financial management consulting services. Registration as an investment adviser is pending with the SEC.

Its equity approach is to use growth and value stocks in approximately equal weighting within the portfolio. The style is active and oriented toward fundamental as opposed to technical analysis.

The firm plans to introduce principal underwriting and finance capabilities during the second quarter.

Brokerage services offered by the firm are fixed income and equity; and sinking-fund special purchase programs.

Consulting services offered by the firm are asset allocation, investment policy development, performance monitoring, abandoned property, financially distressed municipalities and governmental entities.

Key professionals at the firm are Edward A.H. Siedle, president, with 10 years of experience; Eric H. Pookrum, executive vice president, with 11 years; and Vincent J. Santos, vice president-institutional trading, with eight years.

Institutional Portfolio Services Ltd.
One First National Plaza, Suite 2594, Chicago, Ill. 60603; (312) 236-5388

Institutional Portfolio Services Ltd., founded in 1969, offers advisory and management services to pension and profit-sharing trusts, in generally U.S. stock and bond markets. Depending on client preferences, options and futures are used to hedge the portfolio.

It has $90 million under management, of which $50 million is for tax-exempt clients.

Its equity approach is top down, depending on the stage of the economic cycle it anticipates. The firm chooses two dominant firms in each of the five industries that are favorably situated during a given phase of the economic cycle. Less than 10% of the total portfolio is allocated to special situations or turnarounds.

For fixed income, the firm in the past 10 years has emphasized only U.S. Treasuries because of their non-callable and safety features. They are used only when yields have exceeded long-term expectation from equities of around 10% or prior to an expected major change in inflation prospects.

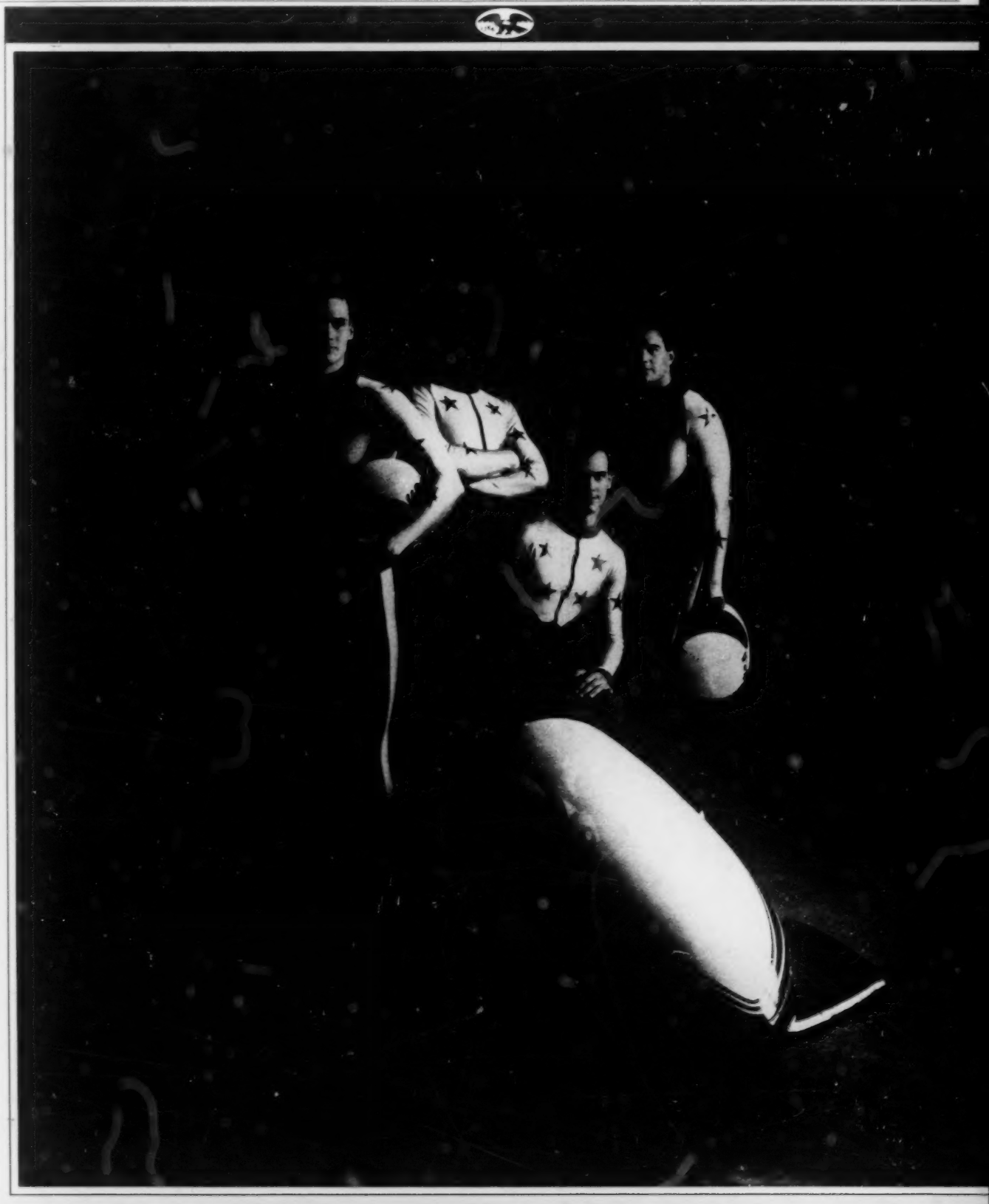
Key professionals at the firm are B.P. Pai, president, with 21 years of experience, and Mohini C. Pai, vice president, with 15 years of experience.

Johnson Capital Management Group Inc.
899 Logan St., Suite 202, Denver, Colo. 80202; (303) 837-8051

Johnson Capital Management Group Inc., founded in 1990, offers equity management.

Its equity approach is to buy domestic companies that can effectively compete in countries worldwide, following a bottom-up approach.

Key professionals at the firm are Odell O. John-



son, president, with six years of experience; William M.B. Berger, chairman, with 40 years; and Rodney Linafelter, portfolio adviser, with seven years.

Labadie Capital Management
2000 Town Center, Suite 1900, Southfield, Mich. 48075; (313) 351-8738

Labadie Capital Management, founded in 1990, offers investment management for individuals, corporations and municipalities.

It has $5 million under management, none of which is for tax-exempt clients.

Its equity approach emphasizes growth, using value parameters to screen the medium- to large-cap growth universe. Its fixed-income approach is active, forming interest rate, credit risk and spread inefficiencies that are implemented via an optimization routine.

Key professionals at the firm are Barbara Boyden Labadie, chairwoman, with 12 years of experience; and Mary Jane Hilker, president, with 10 years.

Lee Asset Management Co.
200 S. 333rd St., Suite 109, Federal Way, Wash. 98003; (206) 838-1026

Lee Asset Management Co., founded in 1989, offers investment management.

It has $19.6 million under management, of which $10 million is for tax-exempt clients.

Its equity approach focuses on fundamental research with use of price target disciplines. The style is value oriented, which includes unrecognized value and out-of-favor securities. In addition to national names, the firm also specializes in Western-based issues. For fixed income, it uses high-grade issues, laddered to meet client needs.

Key professionals at the firm are Laura E. Lee, president, with 13 years of experience; Carol M. Angvall, vice president, with 20 years; and Janice T. White, vice president, with 15 years.

Lefcourt Financial Group
3 Palo Alto Square, Palo Alto, Calif. 94306; (415) 857-9033

Lefcourt Financial Group Inc., founded in 1980, offers investment management.

It has $155 million under management, of which $54 million is for tax-exempt clients.

Its equity approach is growth-oriented and seeks two classes of companies — established growth companies with superior records and prospects and companies experiencing rapid improvement due to specific corporate events. In fixed income, it focuses on sector inefficiencies and mispriced issues to achieve incremental returns.

Key professionals are Carol Lefcourt, chief investment officer, with 25 years of experience, and Jonathan West, senior vice president, with 20 years.

Llama Asset Management
1 McIlroy Plaza, Suite 302, Fayetteville, Ark. 72701; (501) 444-4080

Llama Asset Management Co., founded in 1988, offers discretionary fixed-income management.

It has $60 million under management, of which $52 million is for tax-exempt clients.

The firm aggressively seeks undervalued issues and sectors and currently feels a moderate duration, high-quality portfolio will afford the best returns.

Key professionals are Alice Walton, president, with 18 years of experience; C.E. Lanpher, vice president, with 33 years; and Donna Broomall, vice president, with 10 years.

ORO Financial Inc.
4037 Tulane Ave., New Orleans, La. 70119; (504) 482-4116

ORO Financial Inc., founded in 1987, offers securities broker/dealer services.

The firm offers full services and specializes in domestic institutional equity, listed options and fixed-income capabilities.

Miguel Uria, president, with 28 years of experience, is the key professional.

RhumbLine Advisers Corp.
30 Rowes Wharf, Boston, Mass. 02110; (617) 345-0434

RhumbLine Advisers Corp., founded in 1990, offers investment management.

It has $5 million under management, all of which is for tax-exempt clients.

The firm offers domestic and international management. The equity approach is indexed and structured. For fixed income, the approach is passive.

Key professionals are J.D. Nelson, chief executive officer, with 12 years of experience; John A. Denney, chief investment officer, with 10 years; and Wayne T. Owen, director of marketing, with 12 years.

Solon Asset Management
237 Park Ave., Suite 2100, New York, N.Y. 10017; (212) 551-1716

Solon Asset Management Corp., founded in 1990, offers fixed-income investment management to institutional investors.

It has $250 million under management, of which $25 million is for tax-exempt clients.

For fixed-income accounts it offers value-oriented active management with expertise in mortgage-related securities.

Key professionals are Deborah Hicks Midanek, chief executive officer, and James I. Midanek, chief investment officer, both with 11 years of experience.

Sturdivant & Co. Inc.
130 N. Broadway, Suite 1007, Camden, N.J. 08102; (609) 365-8884

Sturdivant & Co. Inc., founded in 1988, offers equity investment management, research and brokerage.

It has $13 million under management, all of which is for tax-exempt clients.

The firm uses a relative value, bottom-up approach that is approximately 70% qualitative and 30% quantitative. Screening reveals companies with capitalizations greater than $500 million, below-market price-earnings and price-book characteristics and positive earnings growth momentum.

In brokerage, the firm offers a complete range of specialized, cost-competitive services in domestic, OTC and international markets.

Key professionals are Ralph Sturdivant, chairman, with 16 years of experience; Albert Sturdivant, president, with 17 years; and Lorraine Howard, managing director, with 18 years.

Vydex Management Group
125 Worth Ave., Palm Beach, Fla. 33480; (407) 659-3288

Vydex Management Group Inc., founded in 1981, offers portfolio management and investment counseling.

It has $12 million under management, all of which is for tax-exempt clients.

Its bottom-up equity approach is value-oriented, emphasizing undervalued companies with strong growth potential. Its fixed-income approach is active, using a disciplined duration method.

Consulting services offered are investment selection and monitoring and analyzing the performance and investment strategy of portfolio managers.

Key professionals are Pearlena Wallace, president, with 10 years of experience; and Sharon G. King, senior manager, with seven years.

Wagner & Hamill Inc.
410 17th St., Suite 840, Denver, Colo. 80202; (303) 892-6928

Wagner & Hamil Inc., founded in 1975, offers discretionary investment management and advisory services.

It has $235 million under management, of which $10 millions is for tax-exempt clients.

In equities, its strategy combines established growth and emerging growth with a long-term value bias. Equity selection focuses on consistent earnings growth. For fixed income, it focuses on high-quality, current-coupon bonds of short to intermediate maturity, emphasizing capital preservation and high current income.

Key professionals are Judith B. Wagner, chief executive officer, with 20 years of experience; Carolyn Hamil Henderson, president, with 10 years; and Debra L. Holte, executive vice president, with 10 years.

Wedgewood Capital Management Inc.
901 15th St., Suite 220, Washington, D.C. 20005; (202) 408-1550

Wedgewood Capital Management Inc., founded in 1987, offers active fixed-income management for long and intermediate duration assets.

It has $28 million under management, all of which is for tax-exempt clients.

Its fixed-income approach makes modest duration shifts around an index's duration in response to real and observed economic changes.

Key professionals are Daryl C. Dennis, chief investment officer, with five years of experience; Malcolmn D. Pryor, president, with 15 years; and Raymond J. McClendon, chairman, with 15 years.

Barclays deal is completed

The Barclays Group, London, has completed its previously announced acquisition of a 60% interest in E.J. McConnell & Associates Ltd., a Canadian money management firm.

The firm, which is now called Barclays McConnell Ltd., has offices in Toronto and Montreal and a subsidiary, Barclays McConnell (Atlantic) Ltd., Halifax, Nova Scotia.

Graham Colbourne, previously a director of another member of the Barclays Group, London-based BZW Investment Management, has joined Barclays McConnell as chief operating officer. ■

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Put our strength to work for you.

A benchmark alternative

P&I to publish the Efficient Index as regular feature

By Chuck Paustian

To accommodate institutional investors' never-ending quest for more efficient methods for investing in the equity market, *Pensions & Investments* unveils the Efficient Index.

The index, a portfolio of about 150 stocks, offers investors an alternative for equity investing in general and passive strategies in particular. The Efficient Index will become a regular feature of *P&I*'s Statistically Speaking page.

Building off the work of Harry Markowitz during the 1950s, Robert A. Haugen, professor of finance at the University of California, Irvine, and executives of National Investment Services of America Inc., Milwaukee, developed the index in an effort to control risk by devising a low volatility stock portfolio.

At the beginning of any quarter the index is the portfolio that, subject to four constraints, produced the lowest volatility during the previous 24-month period.

The constraints are:

- A stock must be in the Standard & Poor's 500 Stock Index and have a 24-month trading history at the start of the quarter.
- At the start of each quarter, the weight of a stock must be no less than zero and no more than three times its S&P 500 weight or 5%, whichever is less.
- At the start of each quarter, no one industry weight can be greater than 20%.
- Turnover is controlled to approximate 20% annually.

As originally constructed, the Efficient Index was built from the 1,000 largest stocks by market capitalization. The universe was limited to S&P 500 stocks, however, to improve liquidity and investibility.

Mr. Haugen has argued capitalization-weighted indexes — such as the S&P 500 or the Wilshire 5000 — are not appropriate benchmarks for the equity market because they are inefficient portfolios. The inefficiencies arise from the differing constraints faced by groups of investors. He further argues targeting the cap-weighted benchmarks in passive indexing strategies has resulted in substantial costs to investors (*P&I*, Oct. 1, Oct. 15).

In addition, he said investors began to skew the notion of risk, in effect redefining the concept as the degree to which a portfolio tracks one of the cap-weighted indexes. Thus, risk management has become a practice of reducing tracking error.

The Efficient Index, however, returns to the Markowitz concept of risk, namely the variance in a security's or a portfolio's return.

"We've been sitting on this for 40 years and have not really taken advantage of it," Mr. Haugen said.

He uses a culinary analogy to describe differences between the Efficient Index methodology and other forms of stock investing.

"Suppose you're in a kitchen trying to make some stew. You have three cabinets behind you — in one you have the condiments, in one you have the vegetables and in the other you have the meats.

"With security analysis, you take all the ingredients down and taste them individually and if they taste good, you put them in the pot. But you would never put vinegar or garlic in the pot because by themselves they don't taste good.

"The technology of efficient investing examines the interaction of the different ingredients and put them together in the best possible way. In effect, he has given us the recipes for creating some wonderful dishes.

"With current indexing strategies, you simply take everything in the kitchen and throw it in the pot and hope it turns out all right."

Nardin L. Baker, vice president of National Investment Services of America, said the technology used to construct the Efficient Index also can be used to build equity portfolios that, in addition to low volatility, are sensitive to other factors.

"An interesting benefit of using an efficient stock portfolio is that clients can specify their own objectives or constraints, such as avoiding a particular industry or avoiding South Africa-related stocks," he said.

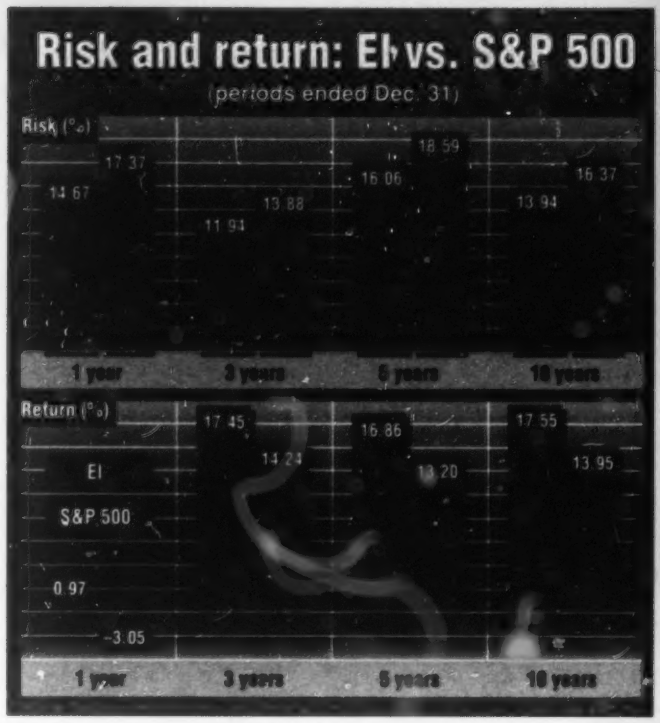
Added Joseph E. Gorman, president of NISA: "I think the place where it would have the clearest application is as an alternative to indexing."

Mr. Gorman said the Efficient Index evolved from efforts to build stock portfolios that were sensitive to interest rates. The idea was to offer pension executives a portfolio with stocklike returns, but bondlike characteristics so as to more closely match a plan's liabilities.

While the initial assumption was that an investor would have to sacrifice some return, "it turned out that when we tried to build a portfolio like that, it had returns superior to the S&P," Mr. Gorman said.

Mr. Gorman said similar results were achieved when the firm and Mr. Haugen tried to build a stock portfolio sensitive to inflation.

The firm has been managing $50 million from four clients in efficient stock portfolios since 1987. The concept of the Efficient Index was developed in the fourth quarter of 1990. ■



Copies of previous *Pensions & Investments* articles on the Efficient Index, as well as additional information on the index's composition, can be obtained from National Investment Services of America Inc., (414) 271-6540.

PBGC study offers own view

By Curtis Vosti

WASHINGTON — A study by the Pension Benefit Guaranty Corp. says the drop in workers covered by single employer defined benefit plans can be attributed solely to employment shifts.

The study, compiled by PBGC Chief Economist Richard Ippolito, challenges prevailing views that the drop in workers covered by defined benefit plans is due to employers' preference for defined contribution plans. This view held the increasing cost of regulations had prompted employers to shift to defined contribution from defined benefit coverage for their workers.

But Mr. Ippolito found that by factoring in the simultaneous drop in union affiliation among workers, looking at just single-employer plans and weighting the data by active participants rather than the number of plans, the net result was almost no change in preferences for single-employer defined benefit plans.

There was a preference change among smaller plans, those with fewer than 1,000 participants, the study showed.

That shift, however, was more than offset among the slightly increasing preference for defined benefit plans among larger plans, Mr. Ippolito said.

The study looked at the period between 1979 and 1987, when participation in defined benefit plans by employees in firms with at least 1,000 workers dropped to 75% from 88%.

Previous studies, which offered support for the view that the drop in coverage was due to a preference for defined contribution plans, differed from Mr. Ippolito's research in several ways other than from the participant-weighting of the data.

He used more recent data that included the union status of the plans; thus he was able to factor in the drop to 16% from 24% of the workforce covered by unions during the study period.

"Union codes are very important because union workers historically have been covered almost exclusively by defined benefit plans," Mr. Ippolito wrote.

"Thus, if union affiliation is not measured, the estimates will attribute employment shifts toward the non-union sector as preference changes."

Another important distinction is that Mr. Ippolito evaluated only single-employer pension plans; he said multiemployer plans react to different stimuli and could unfairly skew the data.

In 1980, Congress included multiemployer plans in PBGC coverage, and attached a liability for the trusts' underfunding to the contributing firms.

This made it attractive for multiemployer trusts to switch to defined contribution plans to limit their liabilities, he said, and during the study period the market share of defined benefit plans among multiemployer trusts dropped to 84.7% from 93.5%, all attributed, he said, to a changing preference.

But, he said, the multiemployer data should be separated from the overall universe of pension plans because of its uniqueness and the likelihood of specification error if two groups were merged.

He also noted the conventional wisdom about the lower cost of defined contribution plans as a reason for a shifting preference is undermined when it is realized that 401(k) plans, the most popular of the defined contribution options, have higher administrative costs than other defined contribution options. ■

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ITS CONSULTING AND APPRAISAL STAFF

with the addition of these key professionals:

Brian D. Flanagan, MAI
Senior Vice President

A former principal with Laventhol & Horwath, Brian Flanagan has responsibility for managing Sudler Marling's real estate consulting and appraisal practice.

Vernon Mathias
Senior Consultant

Nancy A. Nagy
Executive Director/
Business Development

Jay A. Klarcheck
Consultant

Christine L. Smith
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PBGC

Continued from page 2
to pressure corporations to better fund their plans by releasing data on their levels of underfunding.

The agency's list of the top 50 underfunded pension plans — released last week and showing a $14.2 billion shortfall for guaranteed benefits — again provoked cries of protest from many employers.

"This list is probably misleading and only would be indicative of a problem if a company is in financial trouble," said Ben Bastianen, treasurer of Borg-Warner Corp., Chicago. He complained the company's underfunding appeared on the list but its overfunded plans were ignored.

Nevertheless, pension experts generally agree the PBGC must take efforts to reduce its exposure to losses.

The agency's deficit nearly doubled in the fiscal year ended Sept. 30 to $1.78 billion from $1 billion the year before, according to its annual report released last week. That loss largely was due to terminations of underfunded pension plans, which accounted for $927.9 million in fiscal 1990 vs. $163.3 million the year before.

Termination of seven Eastern Air Lines Inc. plans was responsible for nearly $700 million in probable losses. The plans were terminated five days into the PBGC's 1991 fiscal year, but some of the losses were booked in fiscal 1990.

The PBGC also incurred investment losses of about $96 million, in contrast with a $441 million gain in 1989.

All told, the agency suffered a $1.2 billion swing in its profitability, incurring a net loss of $780 million, compared to a $451 million profit the year before. That shows, the PBGC maintains, that remedial legislation enacted in 1986 and 1987 still was not enough to protect the agency.

The PBGC also argues that 30 financially weakened companies may shift about $8 billion in losses to the agency — about 10 times the agency's annual premium income. Such companies likely include Pan Am Corp. and Western Union Corp.

While the PBGC is not seeking any increase in the annual premium it charges sponsors of single-employer pension plans, it expects to propose legislation enhancing its status in bankruptcy proceedings, imposing tougher funding rules and limiting the agency's exposure to plant shutdown benefits (*Pensions & Investments*, Jan. 21).

The agency is making additional efforts to reduce its risk of absorbing big losses.

For example, it is ensuring employers are aware that commonly controlled companies share joint-and-several liability for a sister company's pension woes. In late 1989, the PBGC prevented the sale of Sharon Steel Corp.'s ailing steel unit to investors. If the sale had gone through, healthy members of Sharon's control group would have escaped potential liability for the steel company's pension underfunding.

A newly reorganized Sharon Steel later agreed to pay its plan $65 million in overdue pension contributions while former control group members agreed to back future funding requirements.

Also, the agency nearly negotiated a solution to Eastern's underfunding problem, but failure to agree on collateral caused the collapse of a potential deal with parent company Continental Airlines Holdings Inc. Continental then filed for protection from creditors under the Federal Bankruptcy Code.

The PBGC's top 50 list has elicited stern rebukes from business. The National Association of Manufacturers termed the list as "extremely misleading and potentially damaging."

The list did not appear to have the methodological problems that drew sharp criticism last year, such as inclusion of foreign and executive compensation plans. But employers still were upset because the list did not take into account a company's financial condition or its overfunded plans, and because of the agency's use of a 7.25% discount rate for valuing liabilities, which is lower than that used by many companies.

Navistar International Corp., Chicago, said in a release that "the PBGC's methodology with respect to the calculation of the funding status of Navistar's insured plans is flawed and misleading."

The company said the agency looked at plans at a termination basis instead of an ongoing basis, and ignored the company's cash-matched and duration-matched dedicated bond portfolio. Nor did the list reflect Navistar has reduced its pension underfunding to $51 million as of Oct. 31, down from $1 billion in 1982.

In a statement, James River Corp., Richmond, Va., said more than 80% of its plans are fully funded, and the remainder are funded, on average, at a 90% level. The PBGC list, however, said James River was short $71 million on its $259 million liability for guaranteed benefits.

The list "causes unnecessary fear and concern for employees and retirees," said James Kenyon, a spokesman for Chrysler Corp., Highland Park, Mich., which also was on the list.

Mark Ugoretz, president of the ERISA Industry Committee, Washington, warned the PBGC list may cause "ill will" among employers who have supported the agency's efforts in the past.

But the list does include a number of companies operating under Chapter 11 of the bankruptcy code, such as Pan Am; CF&I Steel Corp., Lone Star Technologies Inc., and Carter Hawley Hale Stores.

Mr. Lockhart warned employers are being "somewhat shortsighted" in their objections to the list because the burden of paying for unfunded guaranteed benefits falls on them.

To further bolster the PBGC's loss prevention strategy, the agency is creating a new corporate finance and negotiations department, to be headed by Diane E. Burkley, the agency's deputy executive director and chief negotiator.

The team of 10 lawyers and five financial analysts will identify and monitor firms with underfunded pension plans and will try to "work out solutions to serious underfunding before a company's problems become overwhelming," Ms. Burkley said in a statement.

The creation of the group also is expected to save the PBGC $1.2 million a year in fees paid to outside lawyers and investment houses.

While the PBGC is taking steps to avoid another increase in the premium it charges employers that maintain defined benefit plans, a boost might be inevitable if the agency's deficit keeps mounting. President Bush's budget warns: "The PBGC's long-term deficit can be expected to grow unless the program can increase its recoveries from companies terminating underfunded plans or can increase its premiums, particularly the variable one, further."

The flat-rate premium is $19 per participant. Poorly funded plans also are charged a variable-rate premium of $9 per $1,000 of underfunding, up to a combined ceiling of $53 per participant. ■

PBGC problem list

Largest unfunded guaranteed liability	Unfunded guaranteed liability $ millions	Funding ratio
Chrysler	2,597	66.2
General Motors	1,021	94.9
Pan Am	621	50.3

Lowest funding ratios	Unfunded guaranteed liability $ millions	Funding ratio
Blaw Knox	79	31.5
Jesup Group	81	33.5
Atlantic Steel	37	37.9

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Approval

Continued from page 3
New York University's Leonard N. Stern School of Business.

"The Wunsch System is an important experiment in increasing market efficiency with the potential benefits of creating market liquidity and decreasing transaction costs," wrote Thomas B. Hazuka, executive vice president, Mellon Capital Management Inc., San Francisco.

Other institutions expressing support for the proposal include Batterymarch Financial Management, Boston; Aetna Life Insurance Co., Hartford, Conn.; Wells Fargo Nikko Investment Advisors, San Francisco; BEA Associates Inc., New York; and the University of California, Berkeley.

Five U.S. stock exchanges — including the New York and American exchanges — filed comments with the SEC, arguing against the start of the trading system.

The stock exchanges fear the system could cut out the role of the market specialist, who maintains a closed book of pending bids and offers, and would trim the fat from bid-offer spreads.

Comments to the SEC clearly show the pressure felt by the exchanges. They argued the exemption sought by the Wunsch system was not intended for start-up operations, or that better standards for qualifying for the exemption were needed.

In addition, some argued the Wunsch system could attract sizable volume, and that its trading capacity exceeds that of the New York Stock Exchange.

The SEC rejected these arguments. Mr. Ketchum argued the system's initial plan of operation to trade only three times a week and its novel requirement that investors disclose their orders in advance to other market participants likely will result in low volume.

In addition, the SEC also rejected arguments from the exchanges that exempting Mr. Wunsch from registration rules would give it an unfair advantage and would permit it to "cherry pick" the best trades. The SEC also determined it would be impractical and too costly for Mr. Wunsch to register as an exchange, as the stock exchanges urged.

Under the Wunsch trading system, an open electronic book would record proposed buys and sells until auction time, which would be either before or after normal trading hours. Orders then would be cut off, and a single price would be set at the level at which the greatest volume of shares would trade. Bids entered above the auction price, and offers below, would be entitled to trade at that price. Bids or offers withdrawn prior to the auction suffer a double commission.

The system initially is intended for institutional investors and broker-dealers trading for their account who do not require immediacy for their trades.

Mr. Wunsch expects to start in mid-March to early April, with auctions occurring at 5 p.m. on Mondays and Wednesdays and 9 a.m. on Fridays.

Eventually, the number of auctions could be increased and the system could be expanded to individuals trading through their brokers.

The SEC's approval represents an amazing leap forward for Mr. Wunsch, who, just three years ago, toiled as a theoretician in Kidder, Peabody & Co. Inc.'s financial futures department in New York. But he already was developing a following among executives of some of the nation's largest pension funds for his writings on sunshine trading and creating a single price auction trading system.

Investors pay a high price in market impact and commission costs for immediacy, Mr. Wunsch argues. Mr. Wunsch estimates about half of the trades executed do not require immediacy, particularly those done by index funds and other "informationless" traders. Those investors requiring immediate execution still would trade on the continuous markets offered by the stock exchanges.

Failing to raise a capital commitment from Kidder, Mr. Wunsch struck out on his own a year ago. He has labored to build a prototype trading system with the help of volunteer support from computer experts on the weekends and in the evenings.

Mr. Wunsch has hired several marketing and sales and systems people, but they all have toiled for sweat equity, forgoing current wages for a share of future revenue and the opportunity to work at home. At Wunsch Auction Systems, it's Mr. Wunsch — a former English major at Princeton University and highly skilled rock climber — who answers the phone.

Mr. Wunsch received a major boost when BT Brokerage Corp., a unit of Bankers Trust Co., agreed to settle and clear trades and determine the eligibility of institutions using the system.

In addition, this fall, about 125 institutions and broker-dealers agreed to serve as "beta sites," executing paper trades through the system. ■

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AT DEADLINE

4 from TPF&C form own firm

Four TPF&C employees in Chicago have left to form a benefits and consulting firm.

Thomas S. Terry, principal and vice president; Harold S. Cooper, principal; James G. Peard, principal; and Lina E. Flores, associate consultant, will open their own Chicago-based employee benefit and actuarial consulting firm in April, servicing mid- to large-size companies.

Steel union gets guarantees

The three-year contract with USX Corp. ratified last week by the United Steelworkers of America contains a host of pension gains for employees.

The contract guarantees pension benefits for five years in the event USX spins off any of its steel division and a plant subsequently shuts down. USX also has agreed the assets of the whole corporation stand behind pension and retiree health obligations.

Kilcullen named to post

Daniel M. Kilcullen has been named executive vice president of the Boston Co. and its chief subsidiary, the Boston Safe Deposit and Trust Co.

He will manage the firm's securities management group, which administers more than $230 billion in assets, and succeeds Robert E. Mainer who had headed the unit on an interim basis.

He most recently was manager of the master trust division.

Fund boosts account

The $30 billion California State Teachers Retirement System gave an additional $25 million for equity management to W.R. Lazard & Co. The commitment, to be funded April 1, brings the total amount managed by the firm for the pension system to $57 million.

INSIDE

AP/Wide World Photos

Searching for capital

Direct oil and gas investments remain on the back burners at many corporate pension funds, but dealmakers are hoping interest in energy will begin to heat up among public retirement systems. Page 3.

Photo by Mary Herlehy

Shareholders of Waste Management will get a chance to vote on independent board directorships because of the SEC ruling.

Board independence on 2 proxy ballots

By Joel Chernoff

WASHINGTON — The Securities and Exchange Commission has ruled proxy resolutions asking that a majority of the board of directors be independent may be placed on proxy ballots at Waste Management Inc. and Dow Chemical Co.

The actions by the SEC's corporate finance division open the door to shareholder challenges of ingrown boards of directors. The rulings also grant institutional investors access to the broadest corridors of power within corporations, and threaten to disrupt traditional relationships between management and directors.

The SEC's letters also are a triumph for the Council of Institutional Investors, which has encouraged its member pension funds to challenge inbred boards. The council represents more than 60 pension funds with more than $300 billion in assets.

Both the $21 billion Florida State Board of Administration, Tallahassee, which authored the Dow Chemical proposal, and the $1 billion-plus Carpenters, District Council, Southern California pension fund, Los Angeles, which initiated the Waste Management resolution, are members of the council.

See **Boards** *on page 31*

404(c) proposal hits employers' wallets

By Hillary Durgin

WASHINGTON — The Department of Labor's revamped proposed regulations affecting participant-directed retirement accounts could increase employers' costs.

The long-awaited 404(c) rules — the Labor Department's most important regulatory project affecting the investment of defined contribution assets — affect the nation's $282 billion in 401(k) salary reduction plan assets.

The proposal is intended to provide employers with limited relief from fiduciary responsibility for the investment decisions participants make.

To avoid that liability, employers would have to follow three broad principles:

- Employers would have to provide a "broad range of investment alternatives" — including at least three diversified investment categories with different risk and return characteristics.
- Participants must be able to switch their investments no less frequently than once every three months.
- Participants must have the opportunity to diversify investments generally and within investment categories.

The proposal comes as corporate executives register increasing concern over the safety of their investments, particularly those invested with the insurance industry, consultants said.

"Plan sponsors want the relief," said Tim Hankins, consultant with The Wyatt Co., Sherman Oaks, Calif. "A lot of plan sponsors are concerned that they are liable as an organization or as an individual as to how well these funds perform."

Overall, pension consultants,

See **Proposal** *on page 33*

Bankruptcy panel blazing new trail

Retirees have voice in benefit talks

By Hillary Durgin

CINCINNATI — Allied and Federated department stores are attempting to cut retiree benefit costs by an estimated $50 million during the next 10 years using ground-breaking procedures in bankruptcy court.

In a closely watched case that is expected to set precedents for benefits negotiation in bankruptcy proceedings, Federated Department Stores Inc. and Allied Stores Corp. are negotiating with a special 15-member committee of non-union retirees to reduce medical and dental benefits.

Companies that file for protection from creditors under Chapter 11 must negotiate with a committee representing their retirees if they want to modify benefits. Allied and Federated, Cincinnati-based subsidiaries of Federated Stores Inc., filed Chapter 11 petitions Jan. 15, 1990. The companies plan to file their plans for reorganization by April 29.

The appointment of the retiree committee was made under a relatively new and little-used provision of the Federal Bankruptcy Code, Section 1114, which protects retirees in Chapter 11 bankruptcy situations. Michael Macris, a partner at Cahill Gordon & Reindel, the New York law firm that is representing the retiree committee, said the proceedings will set precedents about determining how a case involving Section 1114 works.

"You're trail-blazing," Mr. Macris said.

"If any debtor in bankruptcy is seeking to reduce payments of retiree benefits, the debtor is going to have to go through this process," said Bill Gannett, associate with Cahill Gordon.

The special retiree committee was appointed Oct. 4 by an order of the U.S. Bankruptcy Court,

See **Allied** *on page 35*

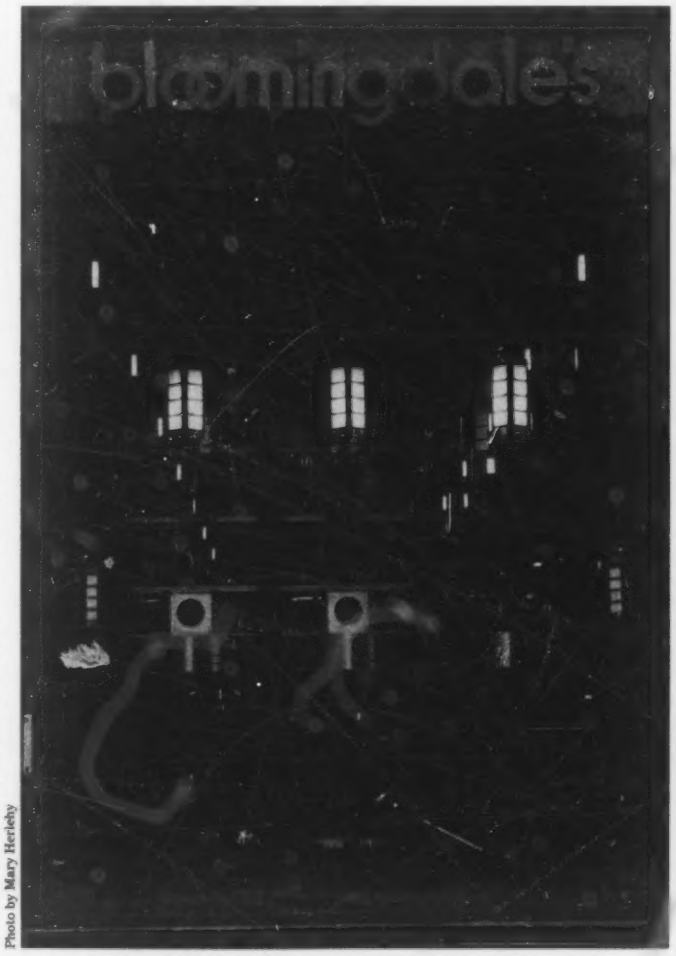

Photo by Mary Herlehy

Retirees from Bloomingdale's will be one group represented on a bankruptcy panel negotiating a plan for cutting retiree benefits.

NEWS DIGEST

AP/Wide World Photos

Dresden and other Eastern European cities are being targeted for real estate investment through a new fund aimed at institutional investors. Story on Page 18.

SPECIAL REPORT: GICs

As growth of the guaranteed investment market appears to be tapering off, pension plan sponsors are exploring ways to diversify risk through the use of alternative contracts. Page 19.

FINANCING

Allied and Federated department stores are attempting to cut retiree benefit costs using ground-breaking procedures in bankruptcy court. Page 1.

The private placement market shrank for the first time in a decade, stricken by a drop in ESOP financings and highly leveraged transactions. Page 34.

INTERNATIONAL

Two U.K. pension funds are joining a few others in offering their in-house investment expertise to outside clients. Page 2.

Interest in global tactical asset allocation is building among pension fund executives. Page 3.

Union Bank of Switzerland is one step closer to its goal of becoming a leading global asset manager with the acquisition of Chase Investors Management Corp. Page 25.

REAL ESTATE

The Teachers Insurance and Annuity Association — College Retirement Equities Fund is planning to commit up to $3 billion to permanent financing in 1991. Page 3.

With returns at a record low in 1990, poor-performing real estate investment managers soon could find their heads on the chopping block. Page 6.

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NCR wooing institutions

Executives take to the road to counter AT&T offer

By Curtis Vosti

DAYTON, Ohio — NCR Corp. officials are flying around the country wooing institutional investors as they brace for battle March 28 against American Telephone & Telegraph Co.

Meanwhile, the two sides were in U.S. District Court in Dayton March 11 and 12, arguing over the legality of the $500 million employee stock ownership plan NCR instituted Feb. 21. A decision is expected by March 19, nine days before special and annual meetings of NCR shareholders.

Each side has played other cards and is expected to reveal others as the March 28 vote nears.

Charles Exley Jr., chairman and chief executive officer of NCR, personally has been visiting some of the larger institutional shareholders in the last weeks prior to the vote.

While the pressing-of-the-flesh seems more akin to a political fight than a proxy vote, it perhaps best illustrates the growing power of institutions in corporate governance issues, observers say.

But NCR spokesman Robert Farkas said the late-date fly-around was part of a continuing strategy. "It's been something he's been pressing ever since the offer was made in December," he said.

While the moves and countermoves continue, institutional investors have been discussing the merits of AT&T's takeover proposal. Many say they expect the telecommunications giant to prevail.

The Council of Institutional Investors has invited both sides to meet March 21 in Washington to discuss the issues with members.

Meanwhile, a March 1 analysis of a $90-a-share offer from AT&T by Eric Ovsiew and Wayne Marr, deputy counsel general and chief economist, respectively, at Institutional Shareholder Services Inc., Washington, recommends that shareholders who own at least five times the market capitalization of AT&T stocks as the capitalization of their holdings in NCR reject the merger proposal, while those with less than five times accept the merger. ■

U.K. funds to market their skills

By Margaret Price

LONDON — Two more U.K. pension funds are opening their in-house investment expertise to other pension funds.

Imperial Chemical Industries PLC and the Electricity Supply Pension Scheme are joining a handful of others, including the investment arm of British Coal Pension Funds, that offer asset management to outside clients.

ICI Investment Management Ltd., London, which manages investments of Imperial Chemical Industries' $8.5 billion pension fund, mainly wants to attract larger funds, those with assets of at least 100 million pounds, said Graham Allen, investment director.

ICI Investment Management already manages assets of a U.K. charity, which Mr. Allen declined to identify.

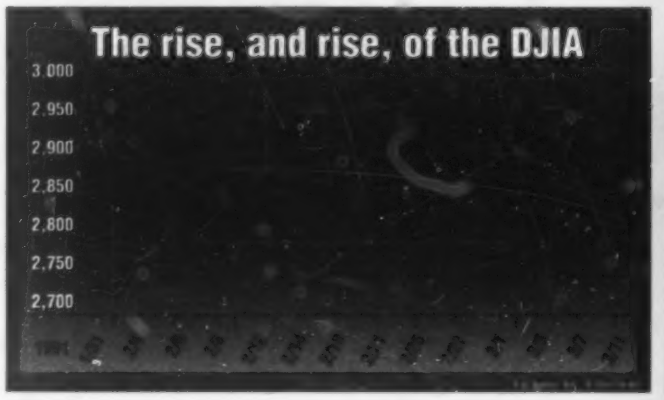
The $16.1 billion Electricity Supply Pension Scheme, which plans to start its outside management activities this year, is targeting small to midsize pension funds. Fund executives still are awaiting approval to offer external management from the Investment Management Regulatory Organization and the electric companies whose assets it now manages. The new unit most likely will operate under the name of E.S.N. Investment Management Ltd.

ICI and Electricity Supply both would offer balanced investment management — including real estate — to outside clients.

ICI decided to extend its managerial services primarily to improve the information flow it receives from brokerage houses. The intentionally low turnover (less than 20%) of the fund's securities holds brokerage commissions in check, which means the brokerage community hasn't always been forthcoming with ideas. ICI fund executives reason the larger the asset base, the more frequent the securities transactions and, therefore, the more frequent the information from brokerage firms.

ICI executives also see an opportunity for corporate cost savings by expanding management services. As Mr. Allen explained, added profits

See **Skills** *on page 34*



Gurus more bullish than large investors

By Margaret Price

As the Dow Jones Industrial Average again approached 3,000, Wall Street strategists were singing in unison glad tidings of the new bull market — but institutional investors didn't automatically join the chorus.

While some investors shared the view that the stock market was heading higher and the recession would ebb, others fretted over unfavorable signs, ranging from what they considered to be unattractive stock valuations to worries about a lingering recession. In fact, some said the market's very euphoria in recent weeks was reason for caution.

Wall Street analysts have produced generally cheery outlooks and a litany of reasons to be bullish. Among the causes for the rosy outlooks are expectations for lower interest rates, more moderate inflation, stronger corporate profits in the second half and the return of individual and foreign investors to the market.

While not offering a prediction for the DJIA, Steven Einhorn, portfolio strategist at Goldman Sachs & Co., New York, said: "Stocks will do appreciably better than cash and do better than bonds" in the coming six- and 12-month periods.

David Bostian, chief economist and investment strategist at Jesup, Josephthal & Co. Inc., New York, foresees the Dow at 5,000 by 1995. His rationale, in part: the market value of the New York Stock Exchange, at $2.6 trillion, was slightly below 50% of the gross national product last November, but will have risen to 70% of an expected $7.5 trillion in GNP by 1995. That doubling of the NYSE's market value implies a doubling of the Dow, he said.

Mr. Bostian recommends an asset mix of 50% equities, 10% gold or gold stocks and 40% Treasury bonds, but he soon might trim bond exposure to 30% and invest that money in cyclical stocks.

A. Marshall Acuff Jr., portfolio strategist at Smith Barney, Harris Upham & Co. Inc., New York, and a professed "early bull" (beginning at year end) said he is "still positive, although the market has come a long way." He sees the Dow trading between 2,400 and 3,100 this year.

An even earlier bull, Michael Sherman, investment strategist at Shearson Lehman Brothers Inc., New York, said he increased his recommended stock allocation to 65% from 55% last March. (His remaining allocation is 30% long-term Treasuries and 5% cash.)

Many institutional investors, however, are being cautious, noted William H. Donaldson, chairman of the New York Stock Exchange at a New York Financial Writers' Association luncheon last week. Mr. Donaldson said it might be "better to buy when everyone's not on the bandwagon. . . . I think at any point in time there are good investments out there. But the market has had a good rise," he said, acknowledging the Dow's trouble piercing the

See **Investors** *on page 34*

INVESTING

NYSE exec pans short-term goals . . .

■ William H. Donaldson, the new chairman of the New York Stock Exchange, is criticizing pension funds for using passive investment strategies that try to match the market's performance instead of trying to beat it.

Speaking at the National Press Club, Mr. Donaldson said money managers, under pressure from plan executives to produce short-term gains, are turning to complex techniques to stay even or slightly outperform the market while ignoring traditional stock-picking techniques.

That "can lead us toward less diversity in the market," he said. He also warned against treating individual equities like commodities — "trading them en masse like soybeans or pork bellies."

Passive investing eviscerates the stock market's main asset-allocation function, he added. What's more, short-term strategies are leading institutional investors to use alternative trading mechanisms that would fragment the market and could reduce liquidity and hurt price discovery, he warned.

William Donaldson is critical of passive investment strategies.

. . . but study reveals pension funds' long-term nature

■ Pension funds might be longer-term investors than some market experts suspect.

A pilot study by Carolyn Brancato, chief economist for Columbia University's Institutional Investor Project, shows two multibillion-dollar pension funds had surprisingly high levels of continuous ownership of their stocks between 1984 and 1989.

One fund, which had both internally managed indexed assets and actively managed stocks run by outside managers, still held at the end of the five-year period 44.3% of stocks that were owned before or purchased during the period; 12.2% of the fund's stocks were held for more than five years.

The second fund, whose stocks were managed entirely in-house on an active basis, held 61.3% of the shares owned before or purchased during the period; 19.2% of the fund's stocks were owned for more than five years.

Ms. Brancato, who also is director of the Riverside Economic Research Institute, hopes to expand the study to 20 public and private pension funds.

The gender gap: Women still trail men in average salary

	Undergraduate			MBA		
	Men ($ thousands)	Women	Salary ratio Men/women	Men ($ thousands)	Women	Salary ratio Men/women
Corporate titles						
Analyst	37.80	35.93	105.2%	42.65	41.41	102.9%
Manager	54.33	44.52	122.0	58.87	54.27	108.4
Cash manager	44.58	39.86	111.8	53.12	45.66	116.3
Director	65.54	45.50	144.0	70.33	65.00	108.2
Assistant treasurer	67.26	53.28	126.2	65.83	58.41	112.7
Treasurer	64.81	61.00	106.2	73.52	71.43	102.9
Vice president	72.83	70.00	104.0	75.16	62.50	120.3
All corporate titles	57.46	42.67	134.7	62.57	53.39	117.2
Bank titles						
Assistant vice president	37.69	40.52	93.0%	41.14	45.00	91.4%
Vice president*	59.79	51.95	115.1	67.79	62.74	108.1
Senior vice president	80.05	69.60	115.0	85.31	107.00	79.7
All bank titles	55.62	45.21	123.0	64.89	57.74	112.4

*Includes the title vice president and treasurer

Source: National Corporate Cash Management Association, Bethesda, Md.

Graphic by Holly Seguine

CASH MANAGEMENT

Women have come far, but there's still a ways to go

■ Women continue to be paid less than men in the treasury management profession, in both corporations and banks, a survey shows.

The average salary for all corporate treasury management titles was $54,000, but the average male's salary was $59,800 vs. $46,100 for the average female, according to the third annual compensation survey, conducted by the National Corporate Cash Management Association and the Journal of Cash Management.

Higher education played an important role in compensation, the survey showed.

After adjusting for gender, age, experience and other factors, an MBA was worth more than $5,300.

The highest overall salaries were reported by treasury professionals in the energy, manufacturing and communications industries. The highest salary increases were reported in the service, insurance and other financial service and retail industries.

Of the respondents, 2,221 were from corporations and 699 from banks.

COMMERCIAL PAPER

Europe's markets smaller, riskier

■ More than half of the commercial paper defaults of the past two years occurred in the developing European commercial paper markets.

Those markets accounted for 57% of the defaults, while the remaining 43% occurred in the much larger U.S. commercial paper market.

According to a special report published by Moody's Investors Service Inc., New York, the defaults in the European markets totaled $533 million, or $3.64 for every $10,000 of commercial paper issued.

In comparison, defaults for U.S. commercial paper totaled $1.1 billion, or 37 cents of every $10,000 invested.

INTERNATIONAL

It's 'Erin go braugh' for investors

■ Investors in country funds should count on the luck of the Irish, a research report by PaineWebber Inc. shows.

Many country funds — which are publicly traded, pooled vehicles for investment in foreign markets — are trading at discounts to net asset value, although these discounts have narrowed somewhat since the end of last year, said William Dinning, a PaineWebber vice president. The average discount was 9.9% at year end; it was 1.1% early in March.

The Irish Investment Fund was trading at an 18% discount early this month, making it the best value of any country fund, Mr. Dinning said. The fund was at 87% Irish equities, its highest market exposure ever, with the balance in short-term instruments. With 40% of its exports going to the United States and United Kingdom, Ireland stands to benefit when these economies come out of recession, likely later this year, Mr. Dinning said.

He also noted the Emerging Mexico Fund, trading at an 11% discount, stands to benefit from economic reforms in Mexico and the move toward a free trade agreement with the U.S. Another good value, he said, is the Latin America Investment Fund, at a 13% discount; this fund invests in Mexico and other Latin American countries.

Other funds offering good long-term appreciation potential are the Growth Fund of Spain, New Germany Fund, Future Germany Fund, France Growth Fund and Europe Fund, Mr. Dinning added.

PEOPLE

He doesn't make house calls either

■ True story:

While on an airplane flight, Merton H. Miller, Nobel laureate and University of Chicago professor of economics, was paged as "Dr. Miller." A woman in the next seat asked about his specialty.

"Econometrics," he answered.

"Oh," she replied. "There's a lot of that going around these days."

— *Crain News Service*

ASSOCIATIONS

AIMR to include Japanese analysts

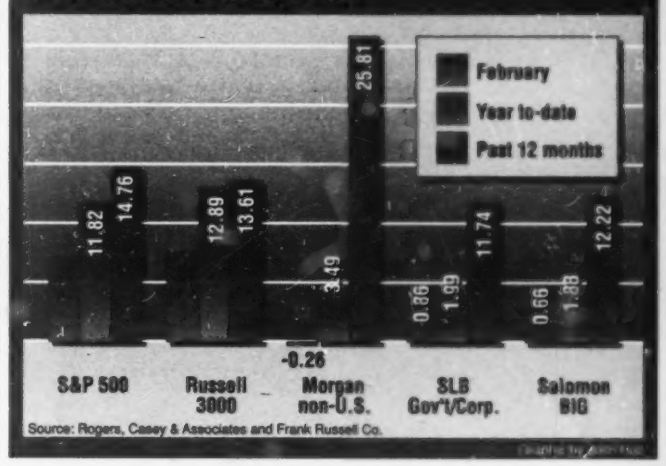
■ Japanese investment professionals will be able to become chartered financial analysts under an agreement reached between the Association for Investment Management and Research and the Security Analyst Association of Japan.

AIMR, which sponsors the CFA designation, hopes to extend investment analyst standards overseas with the new agreement. A similar agreement was reached between the organization and the Society of Investment Analysts in London in 1989.

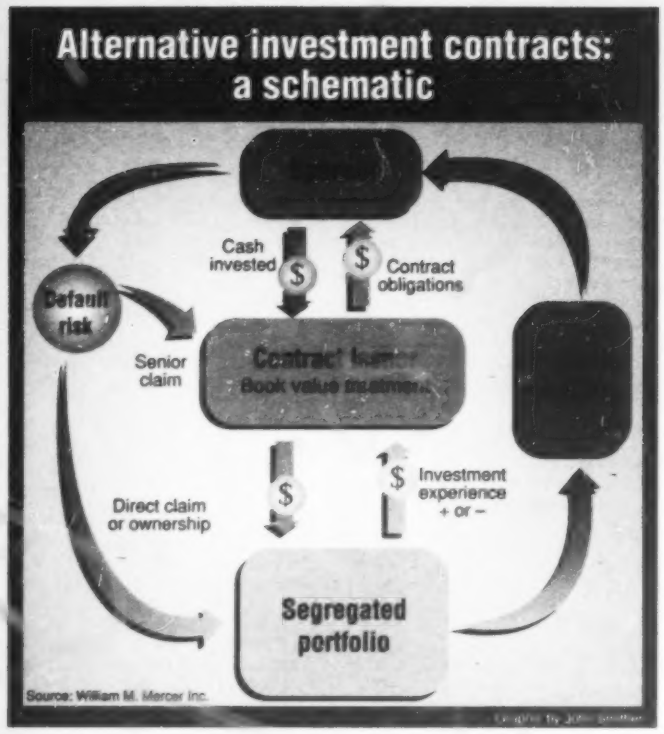
AIMR's Japanese counterpart has 2,400 "chartered members of the association." The new agreement will permit the CMAs to take special exams to qualify for the CFA; a reciprocity feature will allow U.S. investment professionals to become CMAs.

Pensions & Investments' indexes

The P&I monthly indexes track changes in the Standard & Poor's 500, Frank Russell Co.'s Russell 3000 Stock Index, the J.P. Morgan non-U.S. Government Bond Index, the Shearson Lehman Brothers Government/Corporate Bond Index and the Salomon Brothers Broad Investment Grade Bond Index.



Source: Rogers, Casey & Associates and Frank Russell Co.



Alternatives offer ways to spread risk

By Curtis Vosti

Plan sponsors seeking to diversify from the risk associated with investment contracts have pumped nearly $10 billion into alternatives in the past year.

These alternatives, offered by banks and insurance companies, offer sponsors a way to offset the contracts' industry concentration through diversification of the underlying assets.

In some cases, alternatives can be used to enhance yields, creditworthiness and/or liquidity while still maintaining the advantages of the guaranteed contracts: book value accounting, dedicated rates of return and stipulated maturities.

"You can design an alternative that looks, smells and feel very much like a GIC," said Gordon Maltempo, vice president for marketing guaranteed products at Aetna Capital Management Inc., the investment management subsidiary of Aetna Life Insurance Co., New York.

Mr. Maltempo said the typical GIC alternative allows the plan sponsor to insulate plan assets from the general account insurance company risk by separating those assets and/or specifying the underlying securities that back up the guarantee.

The sponsor can end up with an actively managed portfolio with a book-value overlay and can diversify its assets from insurance industry concentration while keeping the liquidity associated with guaranteed and bank investment contracts.

Depending on the product, the bank or insurance company also can provide back-up guarantees for the underlying assets.

Such diversification led E.I. du Pont de Nemours Inc., Wilmington, Del., to invest $300 million in two separate account GICs in the last year, according to Bill Smith, vice president for liability management.

The company's three savings plan have about $5 billion invested in GICs. Mr. Smith said the company chose to use mortgage-backed securities as the underlying asset for its alternatives because of higher spreads over Treasuries and excellent market value, he said. "And if there's a yield kicker to that, we're happy to take it," Mr. Smith said.

Choosing alternatives also involves a tradeoff, he said, from the chance of pre-payment of the mortgage securities to the risk of industry concentration. But he isn't concerned.

"We've not seen any of the risks materialize, and there are ways we can mitigate that," he said.

"Normally, the plan sponsor is trading one risk for another" by using alternatives, said Sharon Morell, vice president of Morley Capital Management Inc., Lake Oswego, Ore.

With GIC alternatives, the buyer can be the owner of the underlying securities so the risk is no longer in the choice of the insurance carrier, but in the choice of the underlying assets. (Those can be chosen either by the issuer or the plan sponsor, and can include government agency bonds, high-grade corporate bonds or even asset-backed securities like credit card receivables.) While the separate account GICs can offer a higher yield because the insurance company needs less reserves, the rate could in future years fluctuate to reflect the market experience of the underlying securities.

Pacific Investment Management Co., Newport Beach, Calif., offers alternatives using mortgage-backed securities with an average five-year maturity, steady payment stream and pass-through experience. The Putnam Cos. Inc., Boston, offers The Guaranteed Horizon Trust, using government or agency bonds and adds two other tiers of backup, which it says guarantees an annual rate to maturity and book value accounting. Other issuers include CIGNA Asset Advisors Inc., The Travelers Cos., Prudential Insurance Co. of America, Metropolitan Life Insurance Co. and Citibank Investment Management.

See **Risk** *on page 21*

The market's thrill is gone

Lack of new 401(k) plans slows growth to single digits

By Fred Williams

The growth of the guaranteed investment market appears to be slowing as the market approaches adolescence.

The strong demand for guaranteed and bank investment contracts in the past five years took place in spite of highly visible problems of enormous junk-bond holdings, problem real estate and mortgage loan portfolios of insurance companies, the major players in the GIC/BIC market.

Now, industry sources across the board believe the rate of growth that has been nearly 20% per year for the past two or three years is slowing; some believe it will be in single digits this year or next.

In a bit of irony, any actual change in the market probably will not be due to the well-documented problems of insurers and banks, but could stem from the very success GICs and BICs have experienced with 401(k) plan participants.

The explosion in the guaranteed marketplace to a $200 billion industry, about 5% of which is made up of BICs, has resulted in increased attention from regulators. The most notable and potentially most significant is the Financial Accounting Standards Board review of one of the most popular features of guaranteed investment products — book-value accounting. Book-value accounting allows plan sponsors to carry guaranteed products at a constant value without market volatility.

Brian Ternoey, principal at A. Foster Higgins & Co., Princeton, N.J., said demand for GICs grew 18% in 1990, down from 25% in 1989.

"The rate of growth is leveling off. It will continue to grow, but (the market) is certainly maturing. . . . I expect growth to continue in 1991 but I expect it to come down a lot, maybe in the single digits," said Mr. Ternoey.

The slowdown, he said, largely is due to the economic downturn "because a lot of people are losing their jobs, contributions are not going in and re-investment may be down." He said much of the continuing demand for guaranteed products is coming from maturing contracts that are being rolled over into new ones.

Mr. Ternoey, and virtually everyone familiar with the guaranteed market, believes the demand for GICs and BICs will continue to come from the 401(k) market, but Mr. Ternoey said that adding new plans and participants "probably doesn't represent more than 5% of the market now."

Surveys by Foster Higgins and other investment consultants continue to show GICs as the single most popular option in participant-directed 401(k) plans, which usually have at least 60% of assets going into GICs.

"As the 401(k) market goes, so goes the GIC business," said Jason Psome, partner with the GIC consulting firm of Brentwood Asset Advisors, Santa Monica, Calif.

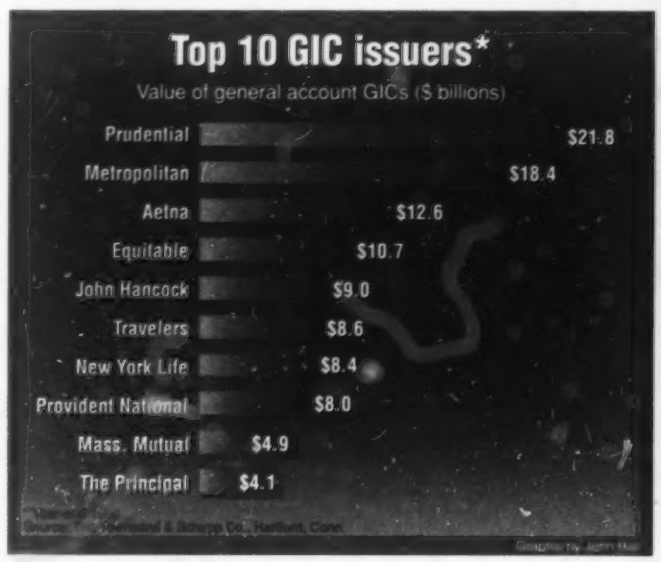
"In the past five years, the huge growth in 401(k) plans has fueled the GIC market but that kind of growth is finite in and of itself. Eventually you will get to the saturation point. Most of the new business we do is not from new plans, but from plan sponsors already in the GIC market who don't want to do it themselves anymore."

Plan sponsors remain positive on the outlook for guaranteed investments, if not as enthusiastic as the plan participants who see the contracts as safe, secure and not subject to market fluctuations as are equities and other fixed-income investments.

GICs and BICs will continue to make up the bulk of 401(k) investments, according to plan sponsors.

"It is employee money and employees have voted enthusiastically for that type of investment," said John Bell, assistant treasurer at Consolidated Edison Co., New York. Guaranteed investments "are widely accepted and liked by participants. They like it so much it's overdone, in some cases." He said some younger employees have elected to invest "almost entirely" in GICs to the exclusion of the equity market "when capital market theory would require the laws of gravity be suspended

See **Growth** *on page 22*



Problems mar industry image

By Fred Williams

Mounting losses from junk bonds and real estate have tainted the health of the insurance industry — central to the continued development of the guaranteed investment market -- although the likelihood of default remains remote.

But the woes faced by insurance companies with problem real estate, junk bonds and capital adequacy have caused some to draw parallels with the troubled thrift business, warranted or not.

Insurance industry troubles also have called into question the role of credit-rating agencies and whether they are fulfilling their role in a timely fashion.

"It is a strong industry with a couple of problems," said David Schupp, partner with Townsend & Schupp Co., an insurance rating service in Hartford, Conn. "Some companies have had aggressive postures with junk bonds and aggressive postures focusing on mortgage investments in what turned out to be volatile areas of the country, (so) they've had problems of concentration."

Thin profit margins on GICs, with spreads ranging from 25 to 75 basis points, "will continue to result in GIC issuers investing in junk bonds, commercial real estate and private placements in order to maintain margins," according to a recent commentary from T. Rowe Price Guaranteed Asset Advisors, Glen Allen, Va.

According to Moody's Investors Service 1990 Life Insurance Industry Outlook, insurance company asset quality is "marginal" and "GIC writers have been accepting (sometimes unknowingly) higher credit risk in investments in order to maintain the spreads in this sector."

Most problems associated with junk bonds have centered around the highly publicized problems of Executive Life Insurance Co., Los Angeles, which wrote off $800 million in junk bond losses last year. Executive Life has about $3 billion in GIC liabilities outstanding.

But expanding problems in the real estate market have captured the most attention recently. Several large carriers face difficulties in their real estate and commercial mortgage portfolios. Travelers Insurance Co. held a total of $993 million in foreclosed real estate properties at the end of September 1990, according to Townsend & Schupp.

Other companies with large amounts of foreclosed properties include Aetna Life Insurance Co., $679 million; Equitable Life Assurance Society of the United States, $434 million; New York Life Insurance Co., $432 million and Mutual Benefit Life Insurance Co., $348 million.

In addition, there are billions of dollars of non-performing mortgage assets in insurer portfolios. According to Salomon Brothers

See **Image** *on page 20*

Growth

Continued from page 19
to believe equities couldn't outperform over the long term."

Con Ed has about $350 million of its $400 million 401(k) plan in GICs and concerns about credit quality of the insurance business, while warranted, may be overdone, said Mr. Bell.

"There are still several AAA rated companies and 401(k) plans typically invest in GICs in the four- to five-year maturity range. It takes a leap of faith to believe a AAA company can get into a situation where it couldn't keep up with claims against them," he said.

William E. Rose, director-risk insurance and retirement assets at TRINOVA Corp., Maumee, Ohio, which has $309 million of its $350 million 401(k) plan in guaranteed assets, said for employees "GICs still carry tremendous weight with a given return, even though you can tell them about capital market theories regarding long-term returns available in the equity market.

"But, we also tell them to choose an option they will be comfortable with. With GICs there is the perceived security, even though I am not certain it is more secure than any other alternative."

He said TRINOVA limits its placements to top-quality AAA rated carriers and uses its consulting firm, Becker & Rooney Inc., Teaneck, N.J. to assist in credit analysis and placements.

Mr. Rose, too, said criticism of the insurance industry solvency, credit quality and investments has been overdone. "I believe they will remain popular as long as the government doesn't do something strange with the accounting rules."

Yet, changes in the accounting rules are in the offing.

In a stunning development last year, the FASB announced it would address the book-value accounting of GICs and BICs with the goal of clarifying the accounting method used for the contracts, possibly requiring some form of market-value accounting (*Pensions & Investments*, May 28).

The announcement sent shock waves through the industry that still are reverberating. Marking GICs and BICs to market would change the nature of the vehicle and, according to industry sources, remove one of the principal advantages of buying the contracts.

Don Delaney, project manager for the GIC analysis at the FASB, said the review is on course and the board still is gathering information. He said an exposure draft is expected to be issued during the second quarter, with a final standard expected by the end of the year.

Mr. Delaney said market value is still the crux of the board's deliberations, and he is aware of the industry's concerns about the impact of requiring market-value accounting for GICs.

"I hear what they are saying, but we are trying to come up with the proper accounting method for these vehicles."

Larry Mylnechuk, executive director of the GIC Association, an industry trade association, said he expects the FASB to allow some flexibility when the final standard is issued and believes there will be exemptions in some cases, possibly allowing a continuation of book-value accounting for some benefit-responsive GICs.

Whether FASB requires some form of market-value accounting for GICs and BICs, there is a sense the insurance and banking industries already are responding by developing alternatives, or synthetic GICs. Synthetic GICs usually are asset-backed, floating-rate instruments with the same characteristics as GICs but are marked to market. ■

Most new GIC/BIC business (net)*

Banks & insurance companies

Firm	$ millions
Hartford Life	1,390
CNA Insurance	1,132
Provident Nat'l Assurance	1,100
Allstate Life Insurance	714
John Hancock	597
New York Life	509
Crown Life Insurance	462
State Street Bank	336
Great-West Life	145

GIC portfolio managers

Firm	$ millions
Bankers Trust	1,722
Fidelity Investments	1,323
PRIMCO Capital Mgmt.	850
Certus Financial	700
Morley Capital Mgmt.	456
IDS Trust	332
Fiduciary Capital Mgmt.	158
Vanguard Group**	107
ASB Capital Mgmt.	35

*U.S. institutional tax-exempt assets in 1990
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Image

Continued from page 20
plan sponsors "should not accept" any public evaluation of these companies but should conduct their own evaluation or get some independent help in making these assessments."

He noted Executive Life held an investment grade rating until the day the bottom fell out of its junk bond portfolio.

Rating agencies "are all reactionary," said Mr. Schmidt, noting that rating changes "all seem to come after the fact, after the bad news, which means they aren't anticipating where the credit is going."

Mr. Meigs defended the rating agencies' role. "We don't have a crystal ball; when you look at the rating agencies you have to ask: Are they bringing any useful information to the table, highlighting the issues and difficulties that the consumer of ratings should take into account in his decision making? The answer is that they are."

Mr. Schupp said his firm "has been very conservative in the way we apply a rating."

"We feel our clients want us to give them a rating on a company that allows them to make a decision that has some stamina. If you get an AA rating today, they should not expect that rating to change dramatically in the near future," he said. ■

Pensions & Investments welcomes letters to the editor. Letters should include the name, address and company of the writer.

The editors reserve the right to edit letters.

Private placements dive

Volume plummets following ESOP financings retreat

By Lori Miller
and Marlene Givant Star

NEW YORK — Stricken by a 72% drop in ESOP financings and the evaporation of financing for highly leveraged transactions, the private placement market shrank last year for the first time in a decade.

Volume plunged 27% or $44.4 billion in 1990 to $120.6 billion from $165 billion the previous year, according to IDD Information Services Inc., New York. Private placements represented 28% of all stock and bond financings in 1990, compared with 35% in 1989.

One thing that didn't change was Goldman, Sachs & Co.'s No. 1 position in the market for the third consecutive year, with $16.1 billion in placements.

Goldman also captured the lion's share, 30.7%, of the 144A market.

Of the $44.4 billion decline in volume, $12.7 billion stemmed from the loss of preferential tax treatment for employee stock ownership plans.

"In 1989 we did quite a large amount of ESOP financing at Prudential. I would say that of our decline of 25%, about half was a decline in ESOP financing. It was a big part of the marketplace in 1989," said Mendel Melzer, senior vice president of Prudential Capital Corp., Newark, N.J.

"ESOPs had a huge impact on the private placement market. They over-inflated 1989 numbers," said Maleyne Syracuse, vice president for private placements at Bankers Trust Co., New York.

In addition, the disappearance of Drexel Burnham Lambert Inc. and the junk-bond market eliminated a key source of debt capital for private companies.

Activity also was strained by the bank credit crunch coupled with stepped-up scrutiny of insurance company investments by the National Association of Insurance Commissioners.

The passage last year of the Securities and Exchange Commission's rule 144A, which brought 37 issues to the market totaling $3.7 billion, was not enough to prop up volume, although bankers predict it could become a greater source of activity over time.

Rule 144A allows U.S. and foreign companies to issue — without registering with the SEC — stocks and bonds directly to big institutions that may trade the securities.

Second to Goldman in volume was First Boston Corp., which retained its 1989 rank with $10.6 billion in volume. J.P. Morgan & Co. moved up two notches to third place with $10.3 billion.

Commercial banks made strong showings for the second straight year, accounting for nine of the top 20 positions, with $38.5 billion in placements.

While IDD predicts the market will be flat in 1991, Mr. Melzer said so far this year Prudential Capital is experiencing an uptick from its year-earlier private placement volume, even without ESOP-related financings.

The enormous growth in private issuance from 1985 to 1989 was driven by many factors, from highly leveraged transactions and leveraged buy-out financings to ESOP loans to high quality companies.

"After extraordinary growth in issuance from 1985 to 1990, this represented a return to more normal debt issuance levels," Mr. Melzer said.

Growth so far in 1991 — largely in straight debt financings — has been spurred by the drop in interest rates, he said.

The only sector of the market that didn't decline last year was securitized placements, which increased to $19.6 billion from $19.4 billion.

"We do see private securitized transactions continuing to be a significant factor in the private market but we don't expect double digit growth rates in any particular area of private issuance," Mr. Melzer added. ■

1990 private placement rankings

Manager*	Amount $ millions	% of total	Number of issues
First Boston	10,644.8	8.8	119
Salomon Brothers	9,765.9	8.1	154
Lehman Brothers	7,087.7	5.9	84
Chemical Bank	4,575.9	3.8	99
Chase Manhattan	4,265.3	3.5	97
Kidder, Peabody	3,446.0	2.9	62
Continental Bank	3,351.8	2.8	65
Bank of America	2,280.5	1.9	51
Dillon, Read	1,424.7	1.2	32
Donaldson, Lufkin & Jenrette	1,275.3	1.1	29

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Investors

Continued from page 2

3,000 level.

The New Jersey Division of Investment, Trenton, which manages $32 billion internally, including $27 billion in state pension assets, "is not jumping on any bandwagon," said Anthony Arcuni, the division's deputy director. "Our views on the equity market at this time are reasonably positive, (but) we would not be surprised to have a market correction, which we would see as a buying opportunity."

Mr. Arcuni expects a slow to moderate economic recovery during the next 12 to 18 months. At present, nearly 50% of the state's pension assets, or about $13 billion, is invested in equities, with the remainder in fixed income. Without being specific, Mr. Arcuni said the division's equity performance last year and so far this year has surpassed the Standard & Poor's 500 Stock Index.

The $9.3 billion Tennessee Consolidated Retirement System, Nashville, is "pushing up against its limitation on equities," said Charles Webb, chief investment officer; the fund has an equity range of 30% to 35%. Other allocations include about 50% in domestic bonds, 4.5% in foreign stocks, about 4% in foreign bonds with the rest in cash.

While the internally managed fund is not a market timer, officials found "over the past three to four months, more and more stocks looked very attractive, and we did increase our weighting somewhat."

The fund sees a number of attractive stock investments but could only buy them now by selling others in order to stay within its investment range.

That band could change in the near future. "We'll discuss (an unusual) change in that allocation in an advisory council meeting in a couple of weeks," Mr. Webb said.

Despite intraday highs, the DJIA — as of press time — has never closed above 3,000. This year's high and low marks were 2,973.27 March 6 and 2,470.30 Jan. 9.

The 30-stock index now stands significantly above its level of last fall, when the market dived on oil price and war concerns.

But breaching 3,000 may prove daunting for a while, said Ray Dalio, president of Bridgewater Associates, Wilton, Conn., who describes himself as a contrarian. Bridgewater has about $550 million under management.

He recalled the 1,000 mark for the DJIA was an impediment for the years between 1964 and 1983, while the 100 level proved formidable for about 20 years until the mid-1920s.

Among other factors, "the chorus of optimism" on Wall Street is also "something to be concerned about." Such euphoria shows "there is not an understanding or appreciation for why this cycle is different from past cycles."

A key difference between this and the last recession, he said, is that although the Federal Reserve has again eased monetary conditions, economic production during this recession — including an 80% level in capacity utilization — is far higher than during the recession of the early 1980s. That means "there's not much economic slack to accommodate growth, and we're also operating in an extremely leveraged economic environment," he said.

PDI Strategies, Newark, N.J., which manages about $10 billion, "started the year bullish with an overweighted position in stocks," said Mark Stumpp, research director.

The firm became cautious and took some profits after seeing interest rates "backing up but the stock market rising." The firm now thinks the Dow is in a trading range and "at best is fairly valued," said Mr. Stumpp. ■

Skills

Continued from page 2

from the management of external assets could help offset outlays the parent pays for handling pension fund investment management.

Executives at both Imperial Chemical and Electricity Supply tout their funds' performance and the fact they include property in their approaches. ICI's Mr. Allen also said managing some of ICI subsidiaries' funds of different sizes and liability requirements has given the investment management unit experience with suiting investment programs to clients' needs.

"We're trying to tailor our service and strategy . . . so that we come up with a suitable fund program rather then saying, 'It's our house's view that you should have, say 55% in U.K. equities, so much in bonds, etc.,' " he said.

Separately, the London-based Electricity Supply fund also will be restructuring its pension investment operations for its electric company clients. The decision results from regulations linked to last year's privatization of the electric industry.

Privatization resulted in the creation of 17 individual companies in England and Wales. According to Inland Revenue regulations, the assets of the now separate companies cannot be used to subsidize each other.

The Electricity Supply fund will comply with the regulation by introducing in April 1992 a unit trust investment arrangement, said Michael B. Cannan, the Electricity Supply fund's chief executive. The 17 companies' funds will be allotted a certain number of units, according to the size of their actuarial liabilities, that will be invested among five unit trusts — one each for U.K. equities, fixed income and property and two for overseas stock.

These new unit trusts will only be used for the electric companies' assets. While outside clients will be offered balanced management of stocks, bonds and real estate, their assets will be managed separately, Mr. Cannan said.

Electricity Supply has good reason for wanting the business: As part of the privatization agreements, the newly created companies will be free to drop Electricity Supply as their pension fund investment manager as of 1995.

Mr. Cannan said external clients are likely to choose the management firm because of its performance and for the opportunity to invest in real estate — which he said few other balanced fund managers now offer. "If the (management) capability can be found, then property is a very good form of investment for pension funds," he said. "While there may be volatility in the capital values of property, there is little income volatility from it.

"I feel there is interest in property among smaller to medium-size funds. Since property returns tend to be countercyclical to equities, a reasonable amount invested in property is necessary if you want a balanced return."

Mr. Cannan believes the Electricity Supply fund's overall returns also will prove alluring. "In equities, we were in the top one-third percentile for three out of the five years between 1985 and 1989," in the universe of the WM Co., Edinburgh. "In the other two years, our returns were at the median" of the WM universe, he said.

In property, "on a cumulative basis, we have been at the top 10% in any period since 1981," he said.

Electricity Supply reported that in calendar year 1989, it posted a 31.8% total return compared with a weighted average of 30.3% for the overall U.K. pension industry as measured by The WM Co.

Mr. Allen said ICI has ranked in the top quartile for the one-, five-, and 10-year periods ended in 1988, as measured by the Combined Actuarial Performance Service Ltd. and The WM Co. ■

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AT DEADLINE

8 sign MacBride Principles

Eight U.S. companies agreed to abide by the MacBride Principles, thanks to the efforts of the New York City and New York State and Local retirement systems, the Minnesota State Board of Investment and religious groups.

Companies signing the agreement — covering fair employment practices in Ireland — are American Home Products, Alexander & Alexander Services, NACCO Industries, Oneida, Procter & Gamble, Sonoco, Texaco, and Teleflex.

Rennie joins PIMCO

Edward Rennie, formerly executive director-trust investments at Bell Atlantic, was named vice president and director of new product services at Pacific Investment Management Co.

Funds' hirings set

CIBA-GEIGY Corp. named Bankers Trust Co. master trustee for its $650 million pension trust and trustee for its $550 million savings plan. The firm also will manage a total of $250 million in passive equities for both plans. . . . The $550 million San Jose Police and Fire Department Retirement Plan hired Baring International Investment Ltd. and GIM Global Advisors Inc. to manage $15 million each in international equities and foreign bonds, respectively. . . . The $450 million San Jose Federated City Employees' Retirement System hired PCM International and The Putnam Cos. Inc. to run $15 million each in international equities and foreign bonds, respectively. . . . The $6 billion New York City Police Department fund hired Bank of Ireland Asset Management to manage $60 million in international equities.

INSIDE

Illustration by Ted Puka

404(c)? Just sit tight

With publication of regulations on employee-directed plans under Section 404(c) around the corner, perhaps the best course of action is no course of action, and the smart move is no move — just do nothing. In Commentary, Page 16.

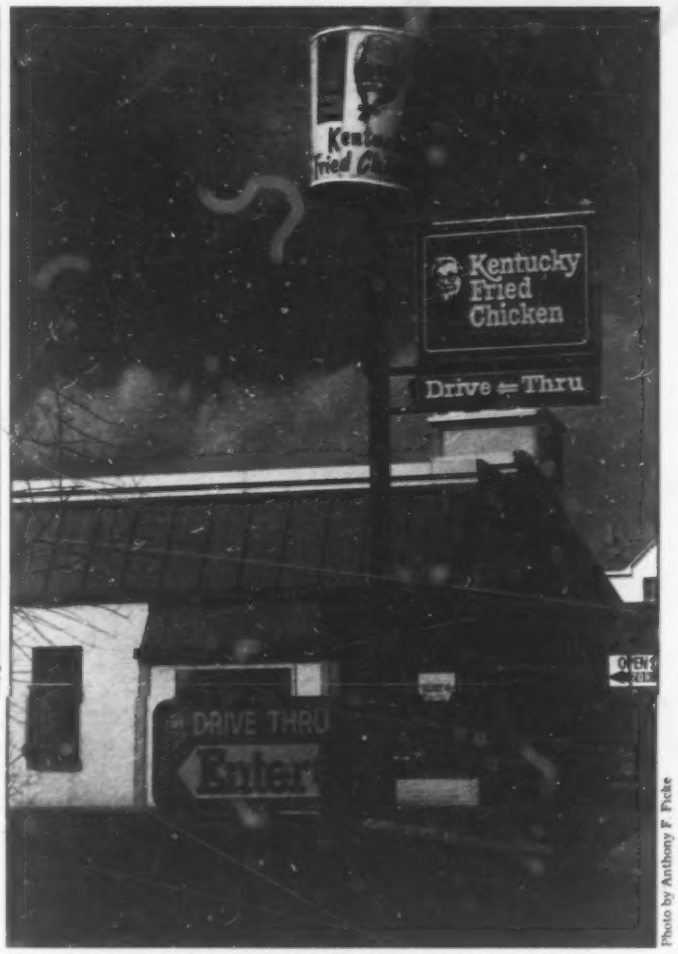

Photo by Anthony F. Picke

Kentucky Fried Chicken, a unit of PepsiCo Inc., jumped on the new-issue bandwagon through the sale of a minority stake in its KFC Japanese subsidiary in a public offering.

Foreign IPO boom rolls through Japan

By Marlene Givant Star

More subsidiaries of U.S. and other foreign corporations are raising capital in Japan by selling off minority stakes to the public, attracted in part by Japan's relatively high price-earnings ratios.

At the same time, as Japanese over-the-counter stocks rally, more of Japan's own privately held companies are expected to go public, reviving the moribund initial public offering market. Growth in the IPO market will be fueled by increasingly relaxed registration requirements, pending installation of a sophisticated NASDAQ-type trading system for OTC stocks and promises of more liquidity, investment bankers say.

In addition, pent-up demand by Japanese investors — including pension funds — for smaller stocks, will encourage a pick-up in IPOs. The expansion could attract more foreign investment in the OTC market as well.

For foreign parent companies, selling stakes in their subsidiaries offers attractive returns on their Japanese investment and a chance to raise capital locally for expansion of their businesses in Japan. They also allow for the establishment of stock ownership plans, in which Japanese employees can own shares in the local unit.

That was a factor behind the most recent IPO by a foreign subsidiary. On Feb. 25, U.K.-based Unitech PLC sold a 26% stake in its Nemic-Lambda Co. Ltd. unit, an electronic parts manufacturer, raising a total of 6.7 billion yen, or $50.7 million.

The deal also was driven by the market's valuations, which are still attractive by Western standards, although not as high as they were in the summer of 1990 when Kentucky Fried Chicken Co.'s subsidiary went public at a p/e of a whopping 75.2.

Said Peter Curry, Unitech's chairman: "We wished to raise capital in Japan on a Japanese valuation basis." The subsidiary's stock sold at a generous 35 times earnings, and has traded subse-

See **Japan** *on page 44*

Minorities statute hits 4 managers

Law knocks firms from CalPERS race

By Steve Hemmerick

The $62 billion California Public Employees' Retirement System eliminated four money managers from competing for real estate investment contracts on grounds they hadn't made good-faith efforts to subcontract with minority- and women-owned firms.

New state laws on minority subcontracting and drug-free workplaces are putting additional pressure on investment firms seeking business with the state of California.

Security Pacific National Bank Trust Group, Los Angeles; Meyer Real Estate Advisors Inc., Anaheim, Calif.; Wellington Real Estate, Boston; and GIM Global Advisors Inc., Newark, N.J., were eliminated from the list of 54 managers seeking the real estate assignment.

Being knocked off of the California fund's list could endanger the managers' chances of getting hired by other pension fund officials who have made minority subcontracting an issue.

Speaking about the California fund's decision, Dena Willmore, senior vice president at Wellington, said: "We're very disappointed in their response to our efforts" at subcontracting. She said the firm is putting its emphasis on "making sure we diversify our workplace" by race and gender.

Although it is "unfortunate" Wellington's efforts didn't meet the retirement system's criteria — which focused on subcontracting — Ms. Willmore added, "But the law is the law, and we think their concerns are extremely valid."

David M. Garcia, vice president for corporate communications, said Security Pacific Bank has an extensive program for minority subcontracting, but that program wasn't identified on the application that was sent to the California Employees' fund.

Last January, said Mr. Garcia, Security Pacific announced it would expand its annual $2.5 million subcontracting program with minority- and women-owned firms to $10 million per year over the next four years, and $25 million in the fifth year.

S.W. DellaGrotta, a senior vice president with Meyer, hadn't heard his firm had been eliminated because of the subcontracting issue. He reserved comment.

Joseph Reed, president of GIM Global Advisers, Greenwich, Conn., said it was a mistake to say his firm hasn't made good faith efforts to subcontract with women and minorities. He said the only company GIM has subcontracted with was a women-owned graphics firm in San Francisco. He added that he doesn't believe his firm received a letter from the California fund that was supposed to ask about the good faith efforts in subcontracting with women and minorities.

He said that he had applied with the California fund as a sector adviser for international real estate investment but subse-

See **Minority** *on page 45*

Shareholders ablaze over tobacco issue

N.Y.C. systems submit resolutions

By Hillary Durgin

WASHINGTON — Shareholder resolutions on tobacco-related issues received a big boost from the Supreme Court decision last week to hear a case that could expose the tobacco industry to billions of dollars in liabilities.

Tobacco stock prices plunged following the high court's decision, bolstering institutional investors' belief that tobacco is an issue that affects not only society's health, but also investors' wallets.

Momentum on the issue is building. The $40.8 billion New York City Retirement Systems' decision to co-sponsor proposals at Philip Morris Cos. Inc., New York, and Loews Corp., New York, has given added clout to the six different shareholder resolutions pending at eight companies.

New York is the first public pension fund to throw its weight into the corporate governance tobacco debate, which until now has been dominated by religious investors groups coordinated by the Interfaith Center on Corporate Responsibility, New York.

"This is not a case where social issues transcend financial results — they go hand in hand," said Gelvin Stevenson, director-investor responsibility at the New York City system. The resolution at

See **Tobacco** *on page 42*

NEWS DIGEST

Photo by Michael A. Marcotte

Although selling securitized mortgages on Saks Fifth Avenue department stores has been tough, bankers still believe the timing is right for other real estate securitizations. Page 30.

The possible sale of TWA to Kirk Kerkorian is being reviewed by the PBGC. Page 46.

SPECIAL REPORT: DEFINED CONTRIBUTION PLANS

Myriad issues surround the use, administration and regulation of the retirement vehicles, which seem to become more prevalent with time. Page 23.

FINANCING

Stock issuance by Japanese subsidiaries of foreign companies is on the rise. Page 1.

Price Communications reconsiders its restructuring after Fidelity Investments blocks one plan. Page 6.

INTERNATIONAL

Lending foreign bonds gains popularity with U.S. funds as U.K. plans ease into overseas deals. Page 2.

REAL ESTATE

United Asset Management gets a traditional real estate manager through a small stake in AEW. Page 2.

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AEW sells stake in firm

$15 million infusion to boost staff, mortgage activities

By Terry Williams

BOSTON — United Asset Management acquired a passive minority interest in Aldrich, Eastman & Waltch Inc. for $15 million in late March.

AEW will use the cash to add staff, boost research and increase its capabilities as a lending intermediary to take advantage of opportunities it perceives a down real estate market presents.

The Boston-based real estate investment manager, which has $5 billion in institutional assets under management, is best known outside pension circles for structuring the refinancing of Chicago's Sears Tower.

The investment is UAM's first in a mainstream real estate money manager, and the first time it hasn't bought 100% of a firm. UAM owns 24 investment management firms with more than 4,400 clients and $45 billion under management.

"To capitalize (on opportunities), we need money in the firm," said Thomas Eastman, managing partner.

AEW Chairman Peter Aldrich emphasized UAM's investment doesn't mean AEW's founders are looking to cash out.

"We think that the only thing that is important is it provides us with the capital we believe will allow us to achieve our plans, at a cost that 's a small passive minority interest," said Mr. Aldrich. "We are tremendously optimistic about the future."

According to Mr. Aldrich, the infusion will be used to expand the firm's asset management and research capabilities, and develop its single-tenant and international property investment businesses.

The proceeds also will be used to enhance AEW's position as an intermediary for real estate lending and purchases of commercial mortgage portfolios by pension funds.

Amy Anthony, Massachusetts' former housing secretary, was hired to lead AEW's apartment lending activities, an area AEW believes will present a "robust" opportunity because of the "disintermediation of the real estate capital markets," said Joseph Azrack, an AEW principal.

"We must replace the thrift-based, multifamily finance industry that was based on the savings and loans, which are now disassembled," Mr. Aldrich said.

AEW plans to buy portfolios of commercial mortgages made last decade. In August, AEW bought Secured Portfolios, Los Angeles, a company of mortgage traders that was formed a year ago by former traders at Drexel Burnham Lambert Inc.

"We acquired them to capitalize on the government and the thrifts being sellers of pools of commercial mortgages in the secondary market," Mr. Azrack said. "We both had the same view about what was happening in the marketplace."

The acquisition of Secured Capital convinced the AEW principals to look at other means to raise money. "That acquisition highlighted for us the price we would

See **AEW** *on page 46*

Securities lending spreads

Overseas bonds are newest twist

By Trudy Ring

As foreign bonds have become more popular with U.S. pension funds, so has the lending of these securities, attracting such participants as the California Public Employees' Retirement System and the E.I. du Pont de Nemours & Co. pension fund.

Several global custodians have begun offering international fixed-income securities lending within the past year, and most fund sponsors that have significant non-U.S. bond holdings have been receptive, the custodians report.

Fund sponsors stand to add anywhere from 40 to 200 basis points of return annually from foreign bond lending, which has a ready supply of borrowers in broker-dealers who are seeking to cover short sales or put up collateral in bond futures transactions.

The $61 billion California Public Employees' fund, Sacramento, is a new entrant into international bond lending, as well as international stock lending. The fund recently hired Bankers Trust Co., New York, to act as lending agent. The fund has $5.2 billion in international equities and $2.8 billion in international bonds. "We understood there was a lending opportunity for both," said DeWitt Bowman, chief investment officer.

DeWitt Bowman sees opportunities in bond lending.

Ron Boller is investigating "compelling economics."

The California fund's master and global custodian, Boston Safe Deposit & Trust Co., has lent securities for it, but fund officials just decided they wanted the international lending activity run separately by Bankers Trust, Mr. Bowman said. It has used other domestic securities lenders as well, he said.

Du Pont has been lending non-U.S. bonds for a few years, said Lawrence Starratt, manager of securities lending. Du Pont went into this area because of its better-than-average profit potential due to the limited supply of, and excess demand for, foreign bonds, he said.

DuPont, based in Wilmington, Del., has about $500 million of its $11 billion defined benefit assets in non-U.S. bonds; only about $30 million worth of bonds has been

See **Foreign bonds** *on page 43*

U.K. funds slow to start programs

By Margaret Price

U.K. institutional investors are warming to foreign securities lending, but the debate continues over the degree of participation that will come from the pension funds, an important source of foreign securities.

Already, some pension funds, such as the British Coal Pension Funds and the British Rail pension fund, are lending foreign securities after the practice got the green light from Inland Revenue Jan. 7. And Morgan Grenfell Investment Management Ltd., London, has permission to use about 33% of its $11.3 billion in assets from U.K. clients -- mostly pension funds — for foreign or domestic securities lending.

Gerald Hough, a director at Morgan Grenfell, expects "that without a doubt there will be a large number of new lenders in the marketplace within the next 12 months."

British Rail Pension Trustee Co. Ltd., London, is participating in foreign stock lending. "Two managers are currently lending foreign stocks in our behalf and possibly one or two others will do so in the next half year," said David Adams, chief executive of the $13.3 billion fund.

The fund probably will not lend more than about 250 million pounds (about $447 million) in foreign stocks, he said. It has been lending domestic stocks for about 18 months, and began foreign stock lending last year.

But pension funds aren't expected to rush into foreign stock lending — even though some U.K. money managers and insurers are hot on that trail. For pension funds, safety has been one concern, and persuading trustees to

See **Programs** *on page 46*

How TAA managers performed

(Calendar year 1990)

J.H. Ayers	14.0%
Wells Fargo Nikko	**8.9**
First Interstate Bank	6.0
R.M. Leary (composite)	**5.9**
J.P. Morgan	5.0
First Quadrant (combined global)	**5.0**
Brinson Partners (global)	4.9
Renaissance	**4.7**
PanAgora Asset (balanced)	4.5
Brinson Partners (domestic)	**4.4**
Bankers Trust (actively managed components)	3.2
First Quadrant (domestic)	**3.2**
QuantiLogic	3.0
Bankers Trust (indexed components)	**2.9**
Chancellor Capital (3-way)	2.3
Mellon Capital (tangent added)	**2.3**
Callan Associates (median balanced manager)	2.3
TSA Capital (3-way)	**2.1**
PanAgora Asset (equity oriented)	2.0
DeMarche Associates (median TAA manager)	**2.0**
Mellon Capital (asset allocation)	1.8
Avatar Associates (3-way index)	**1.7**
Static mix of 60%stocks, 40%bonds	**1.5**
PDI (60-40 normal)	**1.4**
Matrix Capital (domestic)	1.3
Prime Asset	**1.0**
DeMarche Associates (median balanced manager)	0.9
Callan Associates (median TAA manager)	**0.7**
Chancellor Capital (2-way leveraged)	-0.6
Kidder Peabody Asset (balanced)	**-0.9**
Beacon Capital (balanced)	-1.1
Avatar Associates (2-way index)	**-1.4**
S&P 500	**-3.1**
TSA Capital (equity oriented)	**-3.1**
Chancellor Capital (2-way)	-3.4
Beacon Capital (equity)	**-5.2**
Davis, Weaver & Mendel	-8.1
Matrix Capital (global)	**-16.0**

Many TAA firms beat the S&P 500

By Sabine Schramm

Tactical asset allocators' rebalancing strategies performed well in 1990, reacting to signs for poor economic growth and the unanticipated Middle East crisis, which drove the stock and bond markets in August.

Of the 22 TAA managers surveyed by *Pensions & Investments*, only one failed to outperform the Standard & Poor's 500 Stock Index last year. Three managers bettered the index with one TAA strategy and underperformed with another; one manager bettered the index in two strategies and tied the index in a third.

TAA managers employed a variety of asset repositioning strategies, underweighting equities and shifting assets into long-term bonds and cash during the first three quarters of the year. By early November, most were back in the stock market with equity weightings that reflected their models' ideal target allocations.

Investor pessimism and lower interest rates early in 1991 have kept most TAA managers bullish on the stock market, reflected in increased equity allocations in January.

Last year was not a bright year for the stock market and a fair one for bonds. The S&P 500 returned −3.1% for calendar 1990, compared with 31.6% in 1989. The Shearson Lehman Brothers Government/Corporate Bond Index returned 8.3%, compared with 14.2% the previous year. A mix of 60% stocks and 40% bonds, using these indexes, would have returned 1.5%, well behind the 1989 return of 24.6%.

The median TAA manager in DeMarche Associates Inc.'s universe fared well in 1990, returning 2% vs. 0.9% for its median balanced manager. But the median TAA manager in San Francisco-based Callan Associates Inc.'s universe returned 0.7% for the year, while its median balanced manager returned 2.3%. (Returns differed between the two universes mostly because there are different managers in each.)

"Most TAA managers went into 1990 conservatively positioned and it paid off," said William E. Koehler, director of research at DeMarche, Westwood, Kan. "The job of the TAA manager is to add value through reducing risk, and most firms have been successful at doing that. They're doing what they advertise."

Brian Christensen, investment management administrator for the $4.2 billion Caterpillar Inc. pension fund, Peoria, Ill., agreed. "We feel in 1990 TAA performed as we expected it to. It outperformed the S&P, and we were satisfied — very satisfied — with how it did and has done in the years we've been in the strategy." Caterpillar has two TAA managers, which Mr. Christensen declined to identify. According to *P&I's* annual survey of pension funds, one is Mellon Capital Management Inc., San Francisco.

Monsanto Co., St. Louis, was satisfied with the performance of its TAA manager, Chancellor Capital Management, New York. Chancellor outperformed its benchmark, said Pamela Moench, manager of pension asset invest-

See **TAA** *on page 44*

Avon, shareholders agree

Pre-proxy deal calls for investor meetings, secret vote

By Marlene Givant Star

NEW YORK — Avon Products Inc., long under siege by dissident investor group Chartwell Associates, has become the first company to agree to hold semiannual meetings with shareholders to discuss performance and corporate governance issues.

In addition to that agreement, reached with the California Public Employees' Retirement System, Avon also announced it will adopt a United Shareholders Association-sponsored policy on confidential voting.

New York-based Avon is one of a record number of companies this proxy season that have met shareholder demands before annual meetings to avoid placing proposals in proxy ballots.

Corporate governance experts hailed the agreement with the California fund, predicting it will set a precedent for bringing institutional shareholders closer to corporate managements. They also said the accord shows how annual meetings are not sufficient to meet the needs of institutional investors.

"Excellent, outstanding . . . They've agreed to talk in a structured environment on a regular basis. Congratulations to both Avon and CalPERS are in order," said Howard Sherman, vice president of Institutional Shareholder Services Inc., Washington.

Some institutions think changes in the whole corporate governance process are needed.

"What is the purpose of annual meetings if 90% of votes are not represented at the meetings?" asked Albert J. Wilson, vice president of the Teachers Insurance and Annuity Association — College Retirement Equities Fund, New York.

Because of Avon's agreement, the California fund has dropped its resolution calling for establishment of a shareholder advisory committee. The fund rescinded a similar resolution filed with Sears, Roebuck & Co. when the company agreed to hold semiannual meetings with the fund. But Avon is the first company to agree to meet not only with California, but with all of its top 20 institutional holders as well as representatives of the United Shareholders Association.

Under the USA agreement, Avon will adopt a policy in which shareholder proxies, ballots and voting materials will be kept permanently confidential for all matters other than contested elections. USA will release the company from its 1991 Target 50 shareholder activism campaign and assist in the withdrawal of proposals that have been submitted to the company by USA members. Several other companies have adopted confidential voting policies, including Baxter International Inc., Colgate-Palmolive Co., General Signal Corp., K mart Corp., Nalco Chemical Co. and Weyerhaeuser Co.

Both Avon and Sears been targeted by institutional investors seeking to improve corporate performance. Representatives of Avon's management and indepen-

See **Avon** *on page 46*

Cosmetic manufacturer Avon Products' agreement with shareholders might ease the pressure on the besieged firm.

Fund eliminating junk bonds

Other asset classes eyed by CalPERS

By Steve Hemmerick

SACRAMENTO, Calif. — The California Public Employees' Retirement System is dropping junk bonds as an asset class, confirmed Charles Valdes, chairman of the investment committee.

The decision was made in a secret session, but Mr. Valdes said it was based on a belief the junk bond market is declining. Trustees decided other alternative investment classes — which Mr. Valdes wouldn't name — are superior in terms of risk and return.

The California Employees' fund has less than 1% of its $62 billion total assets in junk bonds, not enough to materially affect the overall portfolio. Some trustees believed the fund either had to increase its holdings or drop them entirely. Kathleen Brown, the new state treasurer, made the motion to liquidate the junk bond portfolio.

The size of each asset class is important to a large pension fund. A small or declining market presents a potential investment strategy and liquidity problem for a huge investor like the California fund.

To avoid causing any immediate financial pain to its holdings or those of other investors, the fund intends to sell its portfolio over a period of several months, according to Mr. Valdes.

Although the system originally had $500 million in junk bonds, it values its holdings at $380 million today, primarily because of the market decline, according to DeWitt Bowman, chief investment officer for the fund.

Trustees picked six finalists from among 24 bidders to manage and liquidate the junk bond portfolio, which has been managed in-house. They are: Washington Square Advisers, Minneapolis; Trust Co. of the West, Los Angeles; Loomis, Sayles & Co. Inc., Boston; Caywood-Christian Capital Management, San Diego; Lord, Abbett & Co., New York; and Delaware Investment Advisers, Philadelphia.

The winner, expected to be chosen in a month, will assume positions on bondholder committees for several distressed companies. Those committee positions now are held by fund staff members.

Mr. Bowman said the board wanted the expertise of a manager that actively trades in the market every day to get the highest prices possible for the fund.

See **Junk** *on page 46*

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Fidelity pulls plug on packaged deal

Price to rethink reorganization strategy

By Marlene Givant Star

NEW YORK — A pre-packaged bankruptcy plan proposed for Price Communications Corp. has been blocked by Fidelity Investments and other convertible bondholders.

The troubled publishing and broadcasting company, which defaulted on its bonds in January, is putting the final touches on a new plan that should be ready in mid-April. Price must decide whether to negotiate with Boston-based Fidelity and the other holdouts, or take the chance of filing the new proposal with the Securities and Exchange Commission in the hope of securing agreement from everyone except Fidelity. Price must achieve 66⅔% approval from the holders of each class of its $282 million in bonds for the plan to be effective.

Fidelity — which felt the March 7 plan represented a "quick fix" and contends the proposal does not remove enough leverage from Price's balance sheet — hinted a resolution would be forthcoming.

"We have taken certain efforts to propel this thing along. We're not just sitting around waiting for something to happen. We're moving to resolve the impasse quickly and really to protect our investment," said David Breazzano, comanager of the Fidelity Capital & Income Fund, which buys low-quality and distressed securities. He declined to be more specific.

Price's proposal called for the $105 million issuance of two classes of payment-in-kind bonds and gave junior subordinated noteholders the majority of the company's equity.

Disputes among creditors have become increasingly common in the past 18 months, as different types of institutions have divergent objectives. The deadlocked Price negotiations also point up what some consider a shortcoming of pre-packaged bankruptcy plans, an option virtually all companies prefer to traditional, drawn-out bankruptcy proceedings.

Pre-packaged bankruptcies — a relatively new phenomenon — shorten the bankruptcy process to several months instead of the typical two to four years, because a company's creditors already have agreed to the terms of a reorganization plan. The pre-packaged plans allow a company to save money on legal and financial advisory fees and help avoid the operating problems bankruptcy can cause a company, according

See **Fidelity** *on page 45*

CORRECTIONS & CLARIFICATIONS

- **CGR Advisors** should not have been included in the Feb. 4 Scoreboard listing of real estate managers. CGR has no tax-exempt assets under management.
- **St. John's Hospital**, Detroit, hired three external managers for its funded depreciation account. The hospital was identified incorrectly in the March 4 issue.
- In a March 18 article on alternative guaranteed investments, a product using mortgage-backed securities as its underlying asset base was said to be offered by **Pacific Investment Management Co.** The product is offered through PIMCO's parent, **Pacific Mutual Life Insurance Co.**
- A story in the March 18 issue misreported the amount **New York Life Insurance Co.** held in foreclosed real estate properties as of Sept. 30. The correct figure is $179 million.

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MONEY MANAGERS

NCM Capital gets extra credit for work with students

■ The check was signed, sealed and delivered when Hillary Moore, a trustee with the $40 million Transit Management of Southeast Louisiana pension fund, New Orleans, challenged Justin Beckett of NCM Capital Management to do more than just take the system's money and get out of town.

"I challenged him to give a return to my community," said Mr. Moore, recalling that day in 1987.

Mr. Beckett, a senior vice president with NCM, and President Maceo Sloan responded to Mr. Moore's challenge by coordinating a stockbroker's training course at Southern University that goes beyond classroom instruction to include meetings between students and professionals that service the fund.

Contributing time is neither expensive nor burdensome, according to Mr. Sloan.

Local firms invite the students into their offices for a day. Representatives of out-of-town firms stay an extra day during visits with the fund's trustees.

"When you take a semester and you divide the time that the class meets between 12 firms, you are not talking about a lot of time or money," Mr. Sloan said. "It means the world to these kids."

According to Mr. Moore, if not for the program, the students at Southern, a largely black college, might not become exposed to the securities industry. "I feel and believe that kids in a small black college in my community should be able to see the money that can be made in the institutional investment business," he said.

NCM Capital's Maceo Sloan, right, instructs a Southern University student on investing.

ECONOMY

'Feeble' recovery seen in 2nd half

■ One northern neighbor has a chilling outlook for the U.S. economy.

Despite oft-heard forecasts of an economic revival in the second quarter, Francis A. Scotland, managing editor of BCA Publications Ltd., a firm of consulting economists and editors in Montreal, sees no rebound before the second half of this year. And even then, the recovery should be "feeble," he thinks.

Banking woes coupled with foreigners' declining interest in buying U.S. debt securities will weigh on the economy, he predicted.

"The difference between (downturns in) the 1970s and 1980s is that financial problems were previously more localized. This time banking's problems are systemic," he said.

Mr. Scotland points to a U.S. banking system that is not lending." Even some easing of monetary conditions by the Federal Reserve — and thus lower interest rates — isn't firing up banks' appetite for lending. In his view, commercial banks "think they need to raise lending standards independent of interest rates." At the same time, he notes many of the large money-center banks also lack adequate capital for lending.

Of course, a resumption in bank lending should help rekindle economic growth.

Specific recovery signals he'd look for: lower interest rates in Germany and Japan; an upturn in money supply; and "rallies in financial stocks relative to the entire market."

PEOPLE

Adviser gearing up for expansion

■ Reinhart-Burgan Capital Management Inc., Naples, Fla., is ready for growth and expansion with the addition of a second key executive.

James E. Reinhart, formerly vice president and manager of Shearson Lehman Brothers' Naples office, has been named president of Reinhart-Burgan. He joins W. Wayne Burgan, chief investment officer, who founded the firm as Burgan Investment Management Associates in 1988.

Mr. Reinhart will be responsible for marketing and client service, along with some portfolio management duties.

"Wayne wanted to have somebody to bounce ideas off of," Mr. Reinhart said. The firm will add another portfolio manager and will open an office in Milwaukee later this year, he added.

Reinhart-Burgan, an equity and balanced manager, runs $70 million, half of which is tax exempt. The firm is pursuing more pension fund clients, many of which are wary of hiring a one-man shop, Mr. Reinhart said.

For his part, Mr. Reinhart noted that in the brokerage business, he spent a lot of time recommending money managers and decided he'd like to have a firm of his own.

Reinhart-Burgan uses a fundamental value approach to equity investing. In 1990, its discretionary equity accounts returned 13.2%, while the Standard & Poor's 500 lost 3.1%.

James Reinhart, right, has joined W. Wayne Burgan at Reinhart-Burgan Capital.

REAL ESTATE

No quick fix for office vacancies

■ The U.S. office vacancy rate won't drop below 15% before the year 2022, predicts the real estate research department at Salomon Brothers Inc.

That forecast, three times the rate considered optimum, includes an estimate that the office construction rate will be cut in half from the current level.

In its report "Office Market Conditions Deteriorate: Rough Road Lies Ahead," Salomon researchers estimate nearly 50,000 office jobs will be lost in 1991.

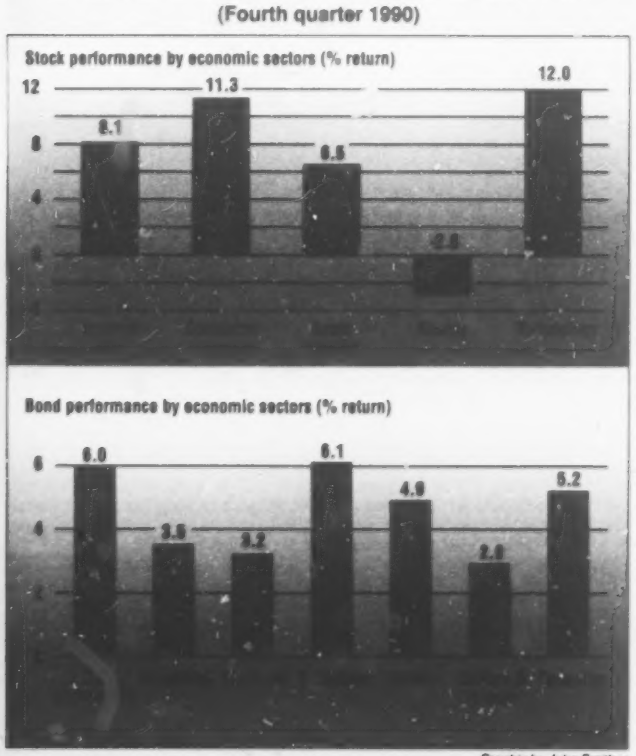
Even though the nation is in a recession, the report said there has been a long-term and possible permanent retrenchment in some industries that use office space.

Even after the current recession, the growth rate in office employment will be well below the 6% average from 1983 to 1988, the report said. Currently, there is a 10-year supply of office space, 498 million square feet.

But some markets will have a lower vacancy rate than others. The report predicted vacancy rates in July 1992 of 6.3% for Honolulu; 12.6%, Seattle; 13.4%, Portland; 14.1%, San Francisco; 14.3%, San Jose, Calif.; 14.4%, Salt Lake City; 14.6%, Jacksonville, Fla.; 14.9%, Kansas City, Mo.; 15.2%, Columbus, Ohio; and 15.6%, Raleigh-Durham, N.C.

DeMarche performance universe

(Fourth quarter 1990)



Graphic by John Smither

INVESTING

Swift to pay fees on energy fund

■ Swift Energy Co., a major Houston independent oil company, has begun offering the first no-load oil and gas income partnerships for retail and institutional investors.

Bruce Vincent, senior vice president-funds management at Swift, said the new $300 million no-load Swift Depository Interests program addresses the two principal obstacles many have toward energy partnerships — liquidity and high front-end costs.

Mr. Vincent said 100% of investors funds will be used to acquire producing oil and gas properties. Swift will pay out of its corporate funds all selling commissions, offering expenses and formation costs.

Mr. Vincent said the no-load aspect will increase investor returns by 20% to 25% over similar loaded partnerships. The partnership — which purchases proven producing, primarily natural gas properties — would begin liquidating in five to nine years. The anticipated overall return to investors, he said, is 12% to 15% annually.

The partnership, launched late last month, has yet to land its first investor.

CORPORATE GOVERNANCE

Heard lends his voice to ISS team

■ James Heard, a leading corporate governance expert, has joined Institutional Shareholder Services Inc., Washington, as senior adviser.

At ISS, Mr. Heard will have far-ranging responsibilities, including editing and writing various reports, speaking and product development.

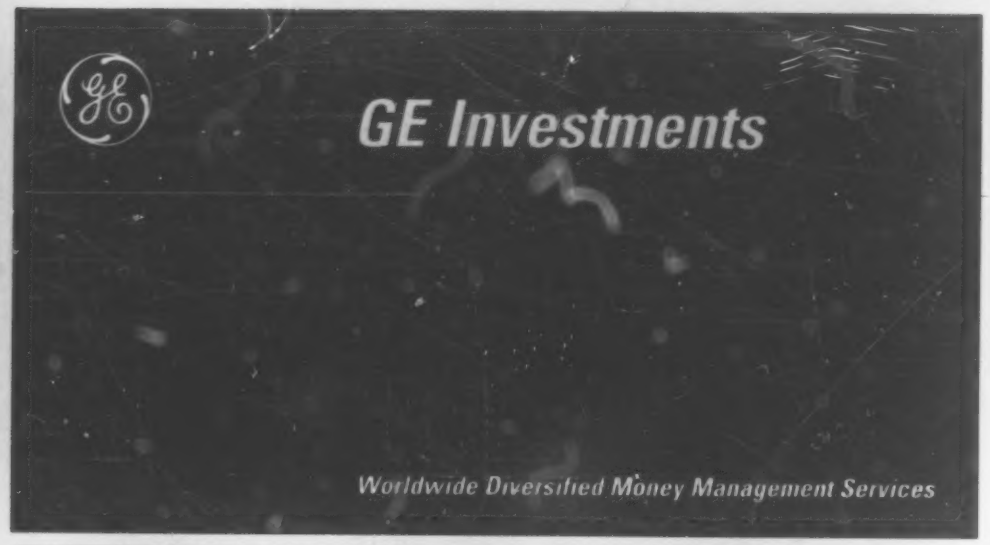
J. Heard

He previously was managing director at Analysis Group, a consulting firm. Before that, he had been the first executive director of the United Shareholders of America and deputy director of the Investor Responsibility Research Center, both in Washington.

Mr. Heard left Analysis Group because it "didn't have a commitment" to corporate governance, he said. The consulting firm also suffered the loss of Lilli Gordon in January, who left to set up her own firm.

Michael Koehn, a principal in Analysis Group's Los Angeles office, said the firm is redefining its scope of services and will move toward providing individual consulting services, instead of focusing on writing issue briefs.

He said the subscription service tried to be "too many things to too many people," was not cost-effective and ran into conflicts with clients. "We've got to pick our niche a little more carefully," Mr. Koehn added.



Analytical software offered for fixed income by Wilshire

By Steve Hemmerick

SANTA MONICA, Calif. — Wilshire Associates, Santa Monica, has entered the computer desktop market for portfolio analytics with a new software product for fixed-income assets.

The software package — called the Wilshire Fixed Income Management Service — requires Intel 80386 microprocessor-based hardware and the OS/2 operating system. Previously, Wilshire clients were on a time-sharing procedure and used a modem to link up to a Wilshire mainframe or minicomputer, according to Robert J. Raab Jr., a senior vice president at Wilshire.

That telephone hook-up procedure wasn't optimal because it was less interactive than a desktop-based system, and telephone line noise could garble the data, said Mr. Raab. Besides not having to time share, the new workstation uses a graphical user interface and a computer mouse for point-and-click operation.

Some of Wilshire's competitors already offer desktop portfolio analytical software. But Dennis Tito, Wilshire's president, said those products use less powerful MS-DOS and are less complex than Wilshire's product. Mr. Tito said he wouldn't offer a desktop software package that wouldn't permit the complete use of Wilshire analytics.

After more than two years of working with IBM Corp., and testing the product at nine client sites, Wilshire is offering the analytics software with a work station. It is an IBM PS/2 Model 70, with a 120-megabyte fixed disk and six megabytes of memory. It uses a 9600 baud modem for transferring data.

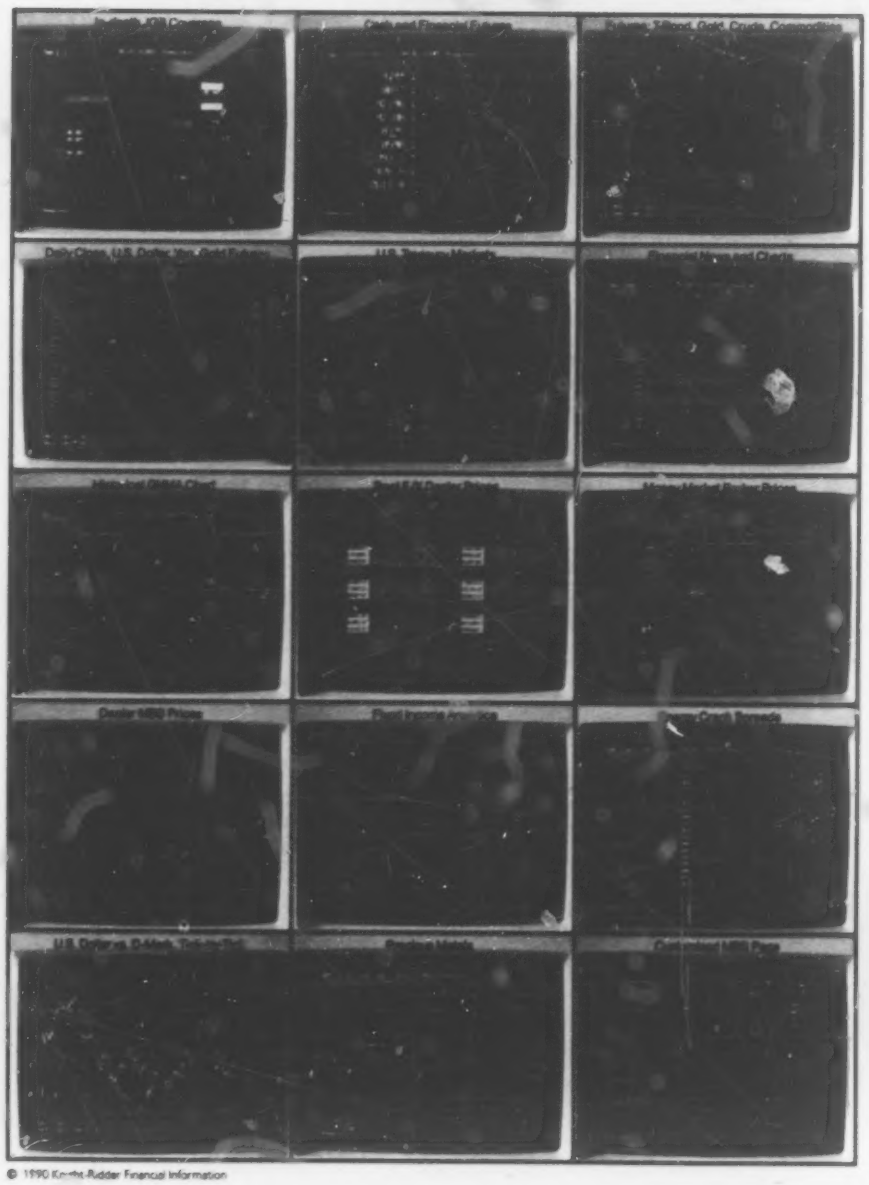
The cost, including the use of the hardware, is between $30,000 and $50,000 annually.

With that system, said Mr. Raab, Wilshire can automatically upload 6,000 bond prices each night into the system in six or seven minutes. Once loaded, the system can optimize a portfolio performing calculations that can take five minutes instead of an hour or longer, according to Mr. Raab.

The system also does what Mr. Raab called true multitasking, permitting the computer to work at high speed on more than one task.

Wilshire also offers two similar applications for equity investing. ■

The Big Picture.



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PIPER figures are amended

Editor's note: *The following firms had funds that missed the deadline, were omitted or were in error when listed in the Pensions & Investments' Performance Evaluation Report for periods ended Dec. 31. All figures, except PIPER and PIPER+ international and global, are for funds that would have placed in the top decile of their universe. Information was provided by M.J. McKinnon of Rogers, Casey & Associates, which compiles PIPER. All figures for periods of more than one year are compound annualized.*

Equitable Capital's PIPER Special Equity Convertibles Fund returned 5.7% for one year and 12.1% for five years.

The Corporate Equity Fund for **First Illinois Bank** in PIPER returned 5.3% for one year and 15.6% for five years.

Minnesota Mutual Life through **MIMLIC Asset Management**'s PIPER Equity Separate Account C returned 2.1% for one year, 9.4% for five years and 12.8% for 10 years.

Ashfield & Co.'s PIPER+ Equity fund returned 15.7% for five years and 19.2% for 10 years.

The Balanced PIPER+ fund of **Godsey & Gibb Associates** returned 4.6% for one year and 12% for five years.

Grantham, Mayo, Van Otterloo & Co.'s Active International PIPER+ fund returned 20% for five years and 21.3% for 10 years.

Japan

Continued from page 1

quently at a 37% premium. Yamaichi Securities Co. Ltd., Tokyo, was lead manager.

At least six U.S. companies are expected to sell minority stakes in their Japanese subsidiaries through public offerings, investment bankers say, representing a quickening of the pace of such issues.

Since 1989, a half-dozen foreign companies — including PepsiCo's Kentucky Fried Chicken Co. in 1990 and privately held Levi Strauss & Co. — have done such offerings. By contrast, only 12 other American and British corporations had sold such stakes in units since 1961.

Levi Strauss, which sold 15% of its Japanese unit to the public in 1989 for $80 million, is seeking Ministry of Finance permission to sell more, which would raise the public shares to 33%.

"Ours was a classic situation of very rapid growth," said Joseph M. Maurer, vice president and treasurer of Levi in San Francisco. "We could have used intercompany loans from the U.S. (to finance expansion), but we generally like our subsidiaries to be self-financing . . . We wanted to become more Japanese as a company."

Meanwhile, hundreds of privately held Japanese companies are expected to sell stock publicly. Nomura Securities International Inc., New York, predicts there will be 5,000 publicly traded companies in Japan by 2000, compared with 1,900 today.

"The Japanese market's comeback bodes very well for IPOs," including those of foreign subsidiaries, said Gregory V. Coggiano, vice president-investment banking of Nomura, which was lead manager on the sale of a minority stake of a Japanese Avon Products Inc. subsidiary in December 1987. The Nikkei Over the Counter average, which bottomed at 2197 Oct. 1 after falling 47% from its peak of 4149 July 9, has since rallied.

OTC securities, which include many IPOs, are traded via telephone. In November, the Japan Association of Securities Dealers Automated Quotations will replace this low-tech system with an on-line computerized transactions system. That will facilitate a potential surge in IPOs, accommodating more volume and more issues.

The increasing size and liquidity of the market will attract Japanese pension funds to invest heavily in OTC stocks, further expanding the market, Nomura suggested.

Japan restricts the proceeds of IPOs. Proceeds from the sale of existing shares may be repatriated to a subsidiary's parent, but the proceeds from the sale of new shares must remain in Japan, according to Hidemi Suzuki, executive vice president of corporate finance at Nikko Securities Co. Ltd., New York. At least part of most offerings are new shares.

"It's generally considered more favorable for the offering if it includes primary shares . . . Most of the transactions have included primary shares partly because the subsidiary needed to raise capital and partly from the standpoint of perception and the success of the offering," said Hugh Winokur, vice president, Goldman, Sachs & Co., Los Angeles.

Customarily, Mr. Suzuki said, a large portion of the shares issued are purchased by vendors and other firms with which the subsidiaries do business.

Levi Strauss, while it chooses to be a private company in the United States, wants public ownership in Japan. "Public companies have more prestige and are viewed more positively," Mr. Maurer said.

Because Levi Strauss is a private company, the subsidiary is not allowed to list on the second section of the Tokyo Stock Exchange, which contains small to medium-size companies.

The subsidiary's shares currently trade over the counter. Mr. Maurer is optimistic the firm will gain an exception to the listing restriction because the parent provides the same disclosure as public U.S. companies.

In many cases, the foreign subsidiaries are joint ventures with Japanese companies. For instance, Kentucky Fried Chicken Japan is an affiliate of Mitsubishi Corp. Often the lead investment bank is chosen based on its long-standing relationship with the Japanese partner in the venture.

Such was the case with Kentucky Fried Chicken. Nikko, the lead manager, has a long-standing relationship with Mitsubishi, which, along with PepsiCo, sold 6 million shares in the company in an IPO.

Bankers are eager for IPO business largely because of the potential future financing needs of the client.

"We believe the OTC market in Japan is now in a similar condition to the OTC market in the United States in 1979 to 1980," according to a Nomura report. "NASDAQ started operating in 1971 and performed strongly in the early 1980s and thereafter. We believe that with a time lag of some 10 years, we are about to see a repeat performance of the American experience in Japan." ■

TAA

Continued from page 3

ments at the $4.1 billion pension fund. The benchmark is a 65% equities, 35% fixed-income mix.

The stock and bond markets' response to the Iraqi invasion of Kuwait was a factor fundamental models could not anticipate. "Last year was one of those years that political risk was more influential than usual," said Steve Lauer, senior vice president at Bankers Trust Co., New York.

Bankers Trust runs $1.3 billion in TAA assets and uses its model to manage an additional $6 billion in balanced, equity and fixed-income accounts.

At the time of the invasion, Matrix Capital Management's position was basically neutral — 65% stocks, 34% bonds and 1% cash — close to its benchmark allocation of 60% stocks, 30% bonds and 10% cash. Mike Petrino, president of the Greenwich, Conn., firm, said the Middle East crisis was an event not quantifiable in a fundamental model. He added the firm, which posted a 1.3% return for its TAA strategy, was able to do better than the S&P return because it could hold bonds.

"We got out of the (stock) market on July 19," said James Ayers, president of J.H. Ayers & Co. Inc., Colorado Springs, Colo. Assets were shifted from 100% equity mutual funds to 100% money markets, a position the firm has maintained. The firm's composite TAA account returned 14% for 1990, the highest return in *P&I*'s survey.

Bankers Trust and Chancellor, although slightly underweighted in equities, maintained a relatively neutral position. Both moved small amounts of assets into bonds rather than cash.

Bankers Trust's benchmark allocation is 55% S&P 500 stocks, 35% Salomon Broad Investment Grade Bond Index bonds and 10% cash. Equity positions ranged from 45% to 55% throughout the year.

J.P. Morgan Investment Management Corp., New York; TSA Capital Management, Los Angeles; and Avatar Associates, New York were positioned more defensively during July and August.

TSA, in a relatively neutral position through July with 54% stock and 46% bonds — near its 50% stock and 50% bond benchmark — moved heavily into bonds, allocating 96% in August, 90% in September and 88% in October. By November, its asset weightings more closely matched its normal allocation with 47% stocks and 53% bonds.

Avatar spent half of the year in moderate postures — 40% stocks, 40% bonds and 20% cash — until just prior to the invasion, when the firm took a defensive position, said Bruce Poliquin, vice president. To preserve capital, the firm moved into cash, changing its asset mix to 25% stocks, 35% bonds and 40% cash in its three-way accounts. Avatar then moved back into the market by the fourth quarter, with 45% stocks and 55% bonds. The three-way fund returned 1.7% for the year.

Kate Leary Lee, president of R.M. Leary & Co. Inc., Denver, said its model moves 100% of assets between classes. Its 5.89% return is a composite of returns of several TAA accounts, ranging from 11.4% to −3.51%. It had back-to-back losses the first two quarters, shifting assets to cash from stocks, but gained in the third quarter by holding bonds and the fourth quarter by moving back into equities. ■

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A bidders conference will be held in Portland, Maine on April 12, 1991.

Please address all correspondence to: **Investment Consultant Search, Maine Retirement System, State House Station #46, Augusta, maine 04333.**

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AT DEADLINE

GIC issuers assess proposal

Guaranteed investment contract issuers think the Department of Labor's proposed 404(c) regulations for 401(k) investment options don't require plans with GICs to add a competing investment option.

The survey of 34 major GIC issuers by Morley Capital Management also revealed the insurance companies would assess an average risk charge of 12.9 basis points for no transfer restrictions if there were a competing option; 9.3 basis points with a three-month restriction; and 5.8 basis points with a six-month restriction.

Paul Quirk joins boutique

Paul F. Quirk, formerly executive director of the Massachusetts Pension Reserves Investment Management Board, has become managing director of The Boston Corporate Finance Group Inc., an investment banking boutique.

Managers selected

Celtrix Laboratories Inc., Palo Alto, Calif., hired Van Kampen Merritt Investment Advisory Corp., Lisle, Ill., to manage $12 million of corporate cash in high-quality, short-term, fixed-income instruments. . . . Frank Russell Trust Co. has hired Philippe Investment Management Inc., Lombard Odier International Portfolio Management Ltd. and Schroder Capital Management International to manage its new Europe Fund.

NCNB-Texas exec retires

H. Ed Anderson, managing director-trust investments at NCNB-Texas, Dallas, has retired. Donald Berdine, who worked in the NCNB trust department in Charlotte, N.C., has succeeded Mr. Anderson.

INSIDE

Photo by Margaret Price

Vive la France!

France, with its rich cultural history, might add a funded pension component that would shore up its time-honored, but financially troubled, national retirement system and boost the country's economy. Page 3.

Court ruling to slash PBGC claims

11.5% rate used to value liabilities

By Joel Chernoff

WASHINGTON — A bankruptcy court ruling involving The LTV Corp. might endanger the Pension Benefit Guaranty Corp.'s ability to recover assets from bankrupt companies that terminate their underfunded pension plans.

The decision, however, is not expected to greatly affect ongoing negotiations to settle the PBGC's claims against LTV. The two parties have reached an agreement in principle that is being discussed by creditor groups.

On April 4, U.S. Bankruptcy Court Judge Burton Lifland ruled an 11.5% interest rate should be used in valuing the pension liabilities of the terminated Republic Steel salaried employees pension plan. That rate far exceeds the range of 7.25% to 8.5% the PBGC argued should be used, and effectively would cut LTV's liabilities by nearly 50%.

The interest rate assumption is used to discount LTV's liabilities. The higher the interest rate used, the lower the amount needed to fund the benefits. As liabilities shrink, the PBGC's potential recovery diminishes commensurately.

"If upheld, this ruling would have a devastating impact on PBGC, decreasing claims and, therefore, recoveries in bankruptcy proceedings by as much as 50%," James B. Lockhart III, executive director of the PBGC, said in a statement. He termed the ruling "fundamentally flawed and misguided."

The Republic Steel plan, with about $250 million in unfunded pension liabilities under PBGC estimates, was taken over by the PBGC on Sept. 30, 1986, two months after LTV sought protection from creditors under Chapter 11 of the Federal Bankruptcy Code. Unlike three other underfunded LTV plans terminated by the agency, the Republic salaried plan was not restored to the company.

But rulings by Judge Lifland continue to be a source of major concern for the PBGC. Last May, the judge refused to give the agency priority status over claims of unsecured creditors in LTV's efforts to reorganize under Chapter 11.

What's more, the judge also said bankruptcy court would control how the interest rate for valuing liabilities would be set, rejecting the PBGC's arguments that the Employee Retirement Income Security Act granted the agency authority to set the appropriate rate.

The U.S. District Court for the Southern District of New York then asked Judge Lifland to develop recommendations on what the interest rate should be. Judge

See **LTV** *on page 34*

Currency strategies getting hot

By Margaret Price

Currency overlay management is starting to catch fire among pension executives.

Some fund officials considering the strategy believe the dollar might have bottomed, which would jeopardize foreign investment returns.

Pension funds now weighing currency overlay management — in which specialists manage the currency component of international portfolios — include the Illinois Municipal Retirement System and the Massachusetts Pension Reserves Investment Management Board. The funds of Scott Paper Co. and Eli Lilly & Co. reportedly are considering hiring overlay managers, but fund officials would not comment.

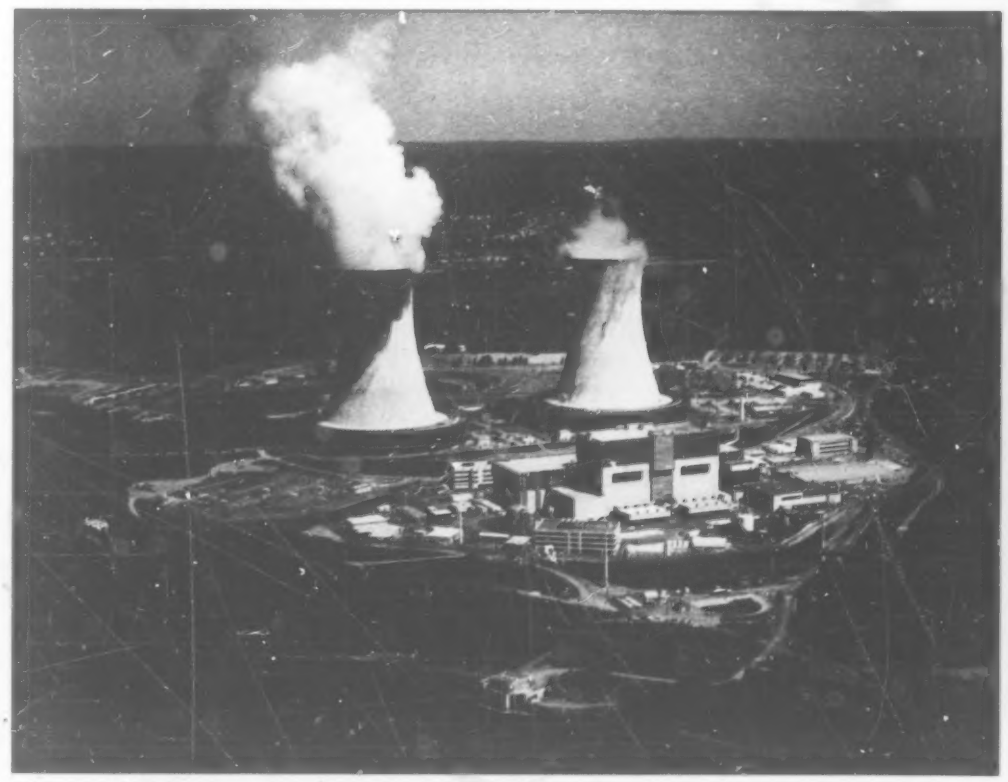
The falling dollar had muted interest in overlay management and hedging in general. But talk of an undervalued dollar — boosted by its late winter surge — has helped galvanize support.

Fund officials are paying more attention to foreign exchange movements now that their international investments have grown, in some cases to as much as 30% of total assets. With such sizable exposure to foreign currencies, executives worry the dollar's rise would harm their international returns, and thus possibly jeopardize the entire fund's performance.

Not surprisingly, some fund executives now wonder whether to postpone additional foreign investing because of dollar-related jitters.

For foreign investors, the dollar's rise comes at a difficult time. Last year, because of poorly per-

See **Currency** *on page 33*



Philadelphia Electric, which runs the Limerick Generating Station, is targeted in a new campaign.

Fund targets board nominees

By Marlene Givant Star

SACRAMENTO, Calif. — The California Public Employees' Retirement System sent letters to chief executives of 14 companies warning the fund will vote against director nominees if the executives don't justify their performance and/or shareholder rights records.

This is the first time a major institutional investor has threatened such action. And this is only the beginning. Another 21 companies will be targeted in coming weeks.

Philadelphia Electric Co. is the only company of those contacted so far that has not adequately addressed the fund's concerns, according to Jose Arau, principal investment officer. Officials at the utility did not return calls for comment.

Other companies contacted include: Hercules Inc.; Monarch Capital Corp.; Dow Jones & Co.; Multimedia Inc.; Brush Wellman Inc.; Cincinnati Milacron Inc.; American President Cos. Ltd.; First Fidelity Bancorp; Consolidated Freightways; and Wendy's International.

In addition to Philadelphia Electric, three other Pennsylvania companies also have been contacted: PPG Industries Inc.; AMP Inc. and Scott Paper Co. The Pennsylvania companies were targeted because the companies did not opt out of the state's antitakeover law when asked to do so by the fund last year.

The new campaign, launched in mid-March, reflects the fund's

See **Nominees** *on page 34*

NEWS DIGEST

Photo by Gary O'Brien

Far away from the steel and glass canyons of Wall Street, Thomas Hollowell, from left, Erskine Bowles, Stephen Cummings, Mark Mealy, Reid Leggett and Charles Conner are making a big name in middle-market deals. Story on page 19.

The same tools used by institutional investors to evaluate their stock and bond investments reveal now is a good time to invest in U.S. farmland. Page 30.

SPECIAL REPORT: 1991 PROXY SEASON

Negotiation, not confrontation, has become the hallmark of this year's proxy season, but the trend might be short-lived. Page 21

Some of the nation's largest corporations are bowing to to pressure by pension funds and shareholder groups and are adopting confidential voting procedures. Page 21.

FINANCING

Two health care companies turn to the private market despite a surge in IPOs and good vibrations for health-related stocks. Page 3.

INTERNATIONAL

Currency overlay management is starting to catch fire with American pension executives eager to preserve foreign investment returns. Page 1.

France's traditional pension system could be changing with the addition of a capitalized component to provide added benefits for retirees. Page 3.

REAL ESTATE

JMB Institutional Realty wants more cash from its Randsworth investors to help pay down a crushing floating-rate debt burden. Page 4.

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International manager survey out

Questionnaires for *Pensions & Investment*'s annual survey of the largest international managers are in the mail. The survey will be the basis for a special report to be published June 24 profiling the largest international and global managers. If you want to be included but have not received a questionnaire, contact Christine Philip, directory coordinator, at (312) 649-5217.

Sloan to purchase NCM

Management buy-out to be completed by end of June

By Terry Williams

DURHAM, N.C. — NCM Capital Management Inc. is being bought out by a management group led by Maceo K. Sloan, the chief investment officer.

Mr. Sloan declined to say how much management would pay for the firm, which was founded in 1986 and is owned by North Carolina Mutual Life Insurance Co. He said the sale should be completed by the end of the second quarter.

Telephone calls to Bert Collins, president of the parent company, were not returned.

The majority of the money to buy the firm will be raised through borrowing, with a small portion made up of equity from an outside investor, according to Mr. Sloan. He declined to name the equity investor.

Negotiations for the management-led buy-out have been ongoing for about three years, but it was North Carolina Mutual's intent to sell the asset management firm to its management since its inception, according to Mr. Sloan. The parent's return on investment would be between 20% to 40% annualized, he said.

"We are now strong enough to stand independently," Mr. Sloan said. "Most clients want to deal with a management-owned company."

NCM Capital manages about $711 million in discretionary tax-exempt assets for 39 clients. The firm also manages $20 million for the insurance company. ■

Maceo K. Sloan is leading the management buy-out of NCM Capital Management.

Kansas investing reviewed

Loans to S&L may spur change

By Fred Williams

TOPEKA, Kan. — A special legislative committee will review the investments of the Kansas Employees' Retirement System following the writeoff by one of the fund's money managers of a $65 million investment in a now-defunct savings and loan.

The result could be an an overhaul of the $4.1 billion system's investment policies and more legislative oversight.

The 12-member bipartisan joint legislative committee originally was to review the system's direct investment program and the two money managers responsible for direct investments, Reimer & Koger Associates and Peters — which made the S&L investment — and Gamm, West & Vincent Inc.

Legislative officials now say they want to go beyond the losses incurred in Home Savings Association of Kansas City, Mo., to examine the system's overall investment policy. They want to emphasize the direct investment program, which focuses on Kansas and regional firms.

Reimer & Koger, Shawnee Mission, Kan., has the largest portion of the direct investment program with approximately $300 million.

Peters, Gamm, West & Vincent, Wichita, manages about $60 million in direct placements.

The direct investments usually took the form of mezzanine loans to Kansas firms.

State Sen. Frank Gaines, a member of the legislative committee reviewing the system's investments, said he believes there is "culpability" on the part of current or former system officials in the case of Home Savings.

"In Kansas, we have the prudent-man rule. KPERS went off on its own in making direct investments in corporations. The savings and loan never would meet the prudent-man rule," said Mr. Gaines.

He said the special committee has taken custody of all records and files on the Home Savings investment.

The state retirement fund made two loans to Home Savings.

The first loan was a $15 million purchase of subordinated capital notes in May 1986. The second was a $50 million loan in 1986 and 1987. The second loan required the system's board's approval to exceed the maximum portfolio investment of $15 million.

The thrift was declared insolvent by the Resolution Trust Corp. March 15.

"This is the tip of the iceberg of what we are involved in," said Mr. Gaines. He said current and former system officials will be part of the investigation.

"Everything is on the table; if there was wrongdoing it will come out. My opinion is that there is some culpability by KPERS somewhere," he said.

The system's direct investment

See **Kansas** *on page 32*

CIBA-GEIGY changes 401(k)

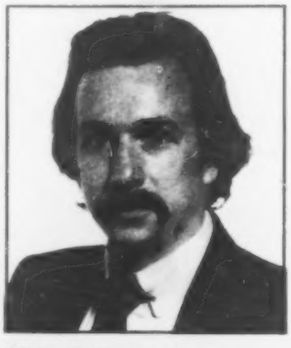
By Marlene Givant Star

ARDSLEY, N.Y. — CIBA-GEIGY Corp. is overhauling its $550 million 401(k) plan to provide participants with a mutual fund-type program without using mutual fund companies.

As a result, the company will pay one-tenth of the investment management fees mutual fund companies typically charge, and participants will get greater flexibility through daily valuation.

Company officials shopped around among mutual fund companies before hiring Bankers Trust Co., New York, as master trustee and investment manager and retaining Benefit Services Corp., Atlanta, as record keeper. William J. McHugh, director of trust funds at CIBA-GEIGY, wouldn't say whom Bankers Trust replaced, but Money Market Directory lists State Street Bank & Trust Co. as master trustee and investment manager.

"Mutual funds tend to be a lot more expensive than our program," said Mr. McHugh. Even record keeping will cost slightly less than what a mutual fund company would charge, he said.



William McHugh said employees have the benefits of mutual funds without the costs.

"Our package has more flexibility than a lot of mutual fund organizations," Mr. McHugh said. He noted, for example, many mutual funds limit employee transactions to four per year. CIBA-GEIGY always has allowed 12 transactions per year, but now they may be done any time during the month, not merely on the last day, as was required before.

CIBA-GEIGY joins an increasing number of companies switching to daily valuation systems, giving more control and flexibility to participants. Hercules Inc., Wilmington, Del., recently adopted an on-line system, also through Bankers Trust. At CIBA-GEIGY, valuations had been monthly.

"There certainly has been a movement that has been afoot in the industry," said Lou Ann Dolan, vice president and senior consultant of Callan Associates Inc., New York, noting it is more important than ever for com-

See **CIBA** *on page 34*

INTERNATIONAL

Brinson expands firm's resources in Japan market

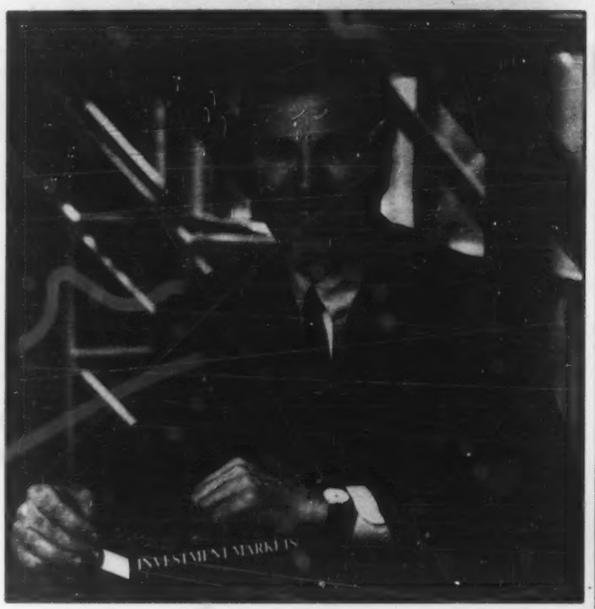
■ With an eye to attracting Japanese pension assets and enhancing its research on Japanese markets, Brinson Partners Inc. has planned a joint venture with one of Japan's largest insurers.

In the venture, Brinson's Japanese subsidiary — Brinson Partners Japan Ltd. — will merge with Yasuda Investment Management Co., the investment subsidiary of Yasuda Fire & Marine Co. Ltd., Tokyo. The merged firm, based in Tokyo, will be called Yasuda Kasai Brinson Investment Management Co. Ltd.

Chicago-based Brinson will own 40% of the firm and Yasuda, 60%, said Gary Brinson, president of Brinson Partners. The firm will manage assets for Japanese clients only, primarily in global equities and bonds.

U.S. firms have a hard time attracting Japanese assets without a Japanese partner, Mr. Brinson said. "We want to make sure we have at least a decent chance of getting some business there."

The joint venture also will benefit Brinson's non-Japanese clients who invest in Japan: "This will give us further access to research, economic data, etc.," Mr. Brinson said.



Gary Brinson, president of Brinson Partners Inc., hopes the venture with Yasuda gives his firm a chance at attracting Japanese clients.

As part of the arrangement, Yasuda will become a minority shareholder — 15% — in Brinson Partners. The share will come from a new issuance of stock, not from Brinson Partners employees, who own the majority, or other minority shareholders, he said.

The Brinson Japan subsidiary brings five staff members to the joint venture; Yasuda Investment, 18. Brinson Japan manages $550 million; Yasuda Investment, $2.4 billion.

ECONOMY

Opinions split on timing of recovery

■ A plurality of respondents to an American Stock Exchange survey predict the recession will be over by year end.

The survey, of chief executive officers of Amex-listed companies, found 48% predicting an end to the recession by year end, with 22% saying it will not be over by then and 30% uncertain.

Respondents also indicated they are facing a credit crunch; 71% said commercial loans are harder to obtain than a year ago.

"Mid-sized growth companies are currently facing restricted access to a critical source of capital," said James R. Jones, Amex chairman.

"Unless this problem is addressed soon, it will have serious long-range implications for the nation's economy," he said.

The group was divided on whether the cost of capital had risen over the past year; 43% said yes, 47% said no. A plurality, 46%, said equity capital has become more attractive relative to debt. "It is another indication that the re-equitization of America will be a hallmark of the 1990s," Mr. Jones said.

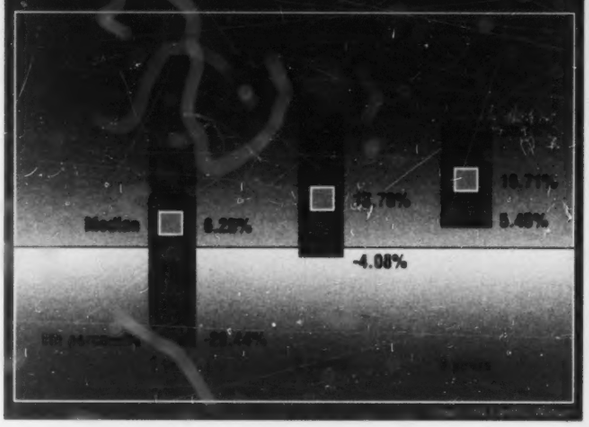
The respondents also showed significant support for reducing the capital gains tax, with 76% in favor, for ending the double taxation of benefits (67%).

The results were based on 224 responses of 827 CEOs surveyed.

Tremont universe of limited partnerships

(Periods ended Dec. 31)

Short-sellers had very strong results in the year. Hedged fund managers and managers using non-traditional approaches also fared well. Value investors, particularly those who focused on cable telephone and media-related issues had a disappointing year. All figures are net of management expenses and performance fees.



INVESTING

Index counters insurers' smiles

■ With junk bond losses and problem real estate chipping away at the credit quality of insurance companies, industry executives continue to claim that all is well.

Because of this seeming incongruity, Ned Schmidt, president of Schmidt Management Co., an insurance company market research firm in Tulsa, Okla., has developed the Insurance Industry Credibility Index.

The index — based on the volume of negative financial reports on 60 major life insurance carriers — has been on the downswing every month. As of March, the index had declined to 88 from 100 at its inception last September.

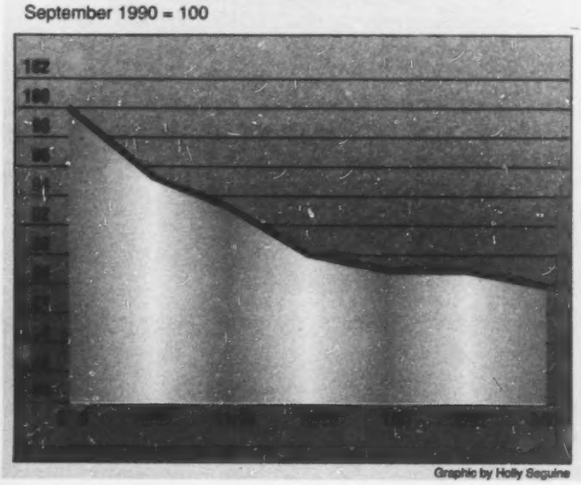
He expects the index to drop even more when the recent bleak news about Executive Life Insurance Co., Los Angeles, and its mammoth junk bond losses are factored in at the end of April.

"The insurance industry continues to state that no significant financial problems exist within the industry. They are trying to convince investors that it is a safe, sound and secure financial industry. On the other hand, they report negative financial results on a regular basis," Mr. Schmidt said.

The index is published in Mr. Schmidt's GIC Strategist report.

The decline of insurance company credibility

September 1990 = 100



Graphic by Holly Seguine

PEOPLE

Equitable execs get new duties

■ John D. Miller, an executive vice president of Equitable Capital Management Corp. and director of its $12 billion private placement portfolio, has been named to the newly created post of chief investment officer for the firm, which runs $33.2 billion.

Separately, Brian F. Wruble was appointed new chief investment officer at Equitable Life Assurance Society of the United States, Equitable Capital's parent company.

Under Mr. Miller, Equitable Capital's private placement department completed approximately 500 private placements totaling more than $9.6 billion during a four-year period.

James R. Wilson was promoted to executive vice president, replacing Mr. Miller as head of the corporate finance department. Mr. Wilson specialized in investment analysis and negotiating and structuring of private deals. He was instrumental in the restructurings of Allis-Chalmers Corp.; AM International Leasing and Memorex. He also led Equitable's entry into the leveraged buy-out market in 1983.

Mr. Wruble retains his position as chairman, president and chief executive officer of Equitable Capital. As chief investment officer for Equitable Life, he will oversee investment strategy for assets in the general and separate accounts.

Richard H. Jenrette, Equitable's chairman and chief executive officer, had been CIO.

Mr. Wruble joined The Equitable in 1979 as vice president and head of the portfolio management division. He was named chief executive of Equitable Capital upon its creation in 1985.

CONSULTANTS

Kwasha touting gain without pain

■ As defined contribution record-keeping services become more complex, a benefits consulting firm is offering what it says allows greater flexibility to meet the new needs while not overextending traditional approaches.

Kwasha Lipton, of Fort Lee, N.J., has been beating the bushes touting "transaction-based valuations," which its officials say will allow plan sponsors to keep the same record-keeping system even if investment managers are changed. The system also allows sponsors to value needed services daily but not overhaul the entire record-keeping system to do so.

The system gives employees access to funds on transaction dates other than the last day of the month; shortens the waiting period for participants who request disbursements; increases participants' ability to make transfers; and retains the efficiencies of batch processing.

"The employer is able to retain much of the cost effectiveness . . . while greatly enhancing plan flexibility," said Ted Barna, press relations manager.

FINANCING

ESOPs might be help to buy-outs

■ ESOP-led leveraged buy-outs have been less likely to run into financial difficulties than conventional LBOs, according to a study by the National Center for Employee Ownership.

The Oakland, Calif., center looked at 102 buy-outs between 1985 and 1988, the 28 largest using employee stock ownership plans for more than 50% of the stock and 74 conventional LBOs of more than $100 million. It found that of those using ESOPs, none is in bankruptcy or default, though two face other financial difficulties.

Of the 74 conventional LBOs, 10 have been in bankruptcy proceedings, four have defaulted on loan or bond payments and another seven are in financial difficulty, the study said.

"In conventional LBOs, companies take on tremendous debt while wages and job security are often sacrificed to pay for (it)," said Corey Rosen, center director. "ESOPs allow employees a fair return on the risk an LBO involves."

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AT DEADLINE

Asset-backed deal in Canada

The Canadian Auto Receivables Trust has come to market with a $350 million ($302 million U.S.) transaction, the first asset-backed bond offering in Canada.

The issue is backed by retail installment sale contracts and the related collateral security sold by Chrysler Credit Canada Ltd.

Realty executives resign

James Lee, vice president of acquisitions for Bennett & Kahnweiler Realty Advisors, resigned April 22. Ten days earlier, the firm's president, James S. Smith, resigned.

Donald W. Schaumberger, president of The Bennett & Kahnweiler Cos., the parent company, is interim president. He wouldn't discuss the resignations; Messrs. Lee and Smith weren't available for comment.

GIC chief quits Moody's

Weston Hicks, vice president and head of insurance industry ratings at Moody's Investors Service, resigned to join Sanford C. Bernstein & Co., where he will initiate coverage of the insurance industry. He was replaced by Chester Murray, a Moody's banking analyst.

Endowment begins indexing

The $5 million Tanager Place endowment hired Dimensional Fund Advisors to invest $700,000 in two domestic equity indexes and Morgan Stanley Asset Management to run $1.5 million in international equities and global bonds.

Industrial portfolio bought

The $62 billion California Public Employees' Retirement System purchased Trammell Crow Industrial Plains, a $126 million portfolio of industrial properties, from Trammell Crow Co., Dallas.

INSIDE

Illustration by Richard Stergulz

Bondholders in the know

Failing to give adequate financial information to bondholders is not just dumb business, it could prove to be a serious — even fatal — miscalculation in today's market. See Commentary, page 14.

Photo by Michael R. Marrotte

From their Tower headquarters, Sears management is fighting Robert Monks' efforts to get elected to the company's board.

Monks seeks help in battle with Sears

By Joel Chernoff

Investor activist Robert A.G. Monks has asked the Department of Labor to intervene in the voting of 23.5% of Sears, Roebuck & Co. stock held on behalf of Sears retirement plan beneficiaries.

Such intervention could delay the company's annual meeting, scheduled for May 9.

Mr. Monks, who formerly headed the Labor Department's pension program, wants the government to force plan fiduciaries to distribute to employee shareholders information concerning his candidacy for Sears' board of directors. Sears officials told Mr. Monks it would cost him $300,000 to have his materials distributed, which he believes is too costly.

Labor Department officials are reviewing a flood of materials on the proxy contest, and they declined to comment. The Sears' case puts the Labor Department in the difficult position of deciding whether retirement plans should pay for distribution of proxy materials if the company fails to do so.

Mr. Monks' request is part of a last-ditch strategy to get elected to Sears' board of directors in the face of stiff company opposition. Both Mr. Monks and Edward Brennan, chairman and chief executive officer of the Chicago-based company, are courting shareholders for their votes in what has turned into one of the most symbolically important contests of the proxy season. At stake is whether institutional investors can get their own candidates considered in an election for the board of directors, even when no takeover threat is apparent.

Elections of corporate boards are "really a sham," Mr. Monks has said.

His experience provides added proof for the need to overhaul the Securities and Exchange Commission's proxy rules, observers said.

There are other issues. While Mr. Monks emphasizes his extensive experience in business and finance and service on other corporate boards, some observers believe he is viewed as a gadfly by corporate America. Corporate boards are "clubs, and you don't ask outsiders to come in to join the club," said one investment expert.

Sears has taken several steps to make Mr. Monks' efforts more difficult. On March 12, Sears

See **Monks** *on page 32*

Executive Life fall-out begins

Honeywell, Alaska freeze payouts

By Fred Williams

Honeywell Inc. and the State of Alaska have frozen payouts from their employee benefit funds that had invested with troubled Executive Life Insurance Co.

MagneTek Inc., meanwhile, will continue to make payments.

Other companies that invested through Executive Life include Xerox Corp., Revlon Inc., International Paper Co. and Pacific Lumber Co. Company officials confirmed the investments, but declined further comment.

And sources said employee benefit plans at Unisys Corp., IBM Corp. and Cannon Mills Co. also made investments through Executive Life. IBM officials declined to comment; calls to Unisys and Cannon were not returned.

If the troubled carrier goes into liquidation, as some anticipate, participants whose plans bought guaranteed investment contracts or annuities from Executive Life could lose a portion of their expected income.

The collapse of Executive Life, brought on by the deterioration of its massive junk bond holdings, is leading to a flight to quality by GIC investors and more intense emphasis on credit quality among carriers. A longer term effect will be to make the GIC market more efficient; investors can expect to pay a premium for higher quality in their GIC portfolios, according to industry sources. Investors also may see GIC yields suffer.

Executive Life was a force in the GIC business in the mid-1980s and still has about $3 billion in GICs, according to most sources, although as much as half of that could be funding agreements with various state and local governments. Funding agreements are used to invest bond proceeds or other assets pending actual long-term spending.

Executive Life has $10.1 billion in total assets; Executive Life of New York, a division, has $3.1 billion. In addition to $3 billion in GIC liabilities, Executive Life has 170,000 life insurance policies outstanding with a face value of $38 billion and 75,000 annuities worth $2.5 billion.

Employee benefit executives are scrambling for answers on how to deal with Executive Life contracts.

Officials at Honeywell, in a written statement in response to inquiries about its Executive Life holdings, said 16% of its $450 million fixed income for its company savings plan — or about $72 million — is in Executive Life GICs.

"Now that Executive Life has been placed into conservatorship, this 16% of the fixed-income fund has been isolated and will only make payments to participants as payouts are received from Executive Life . . . The company continues to monitor the situation carefully," the statement said.

The situation is similar at the $530 million Alaska Supplemental Benefits System, a Social Security replacement fund for Alaska state employees.

See **Freeze** *on page 33*

Participants may sue over GICs, annuities

Insurer's customers could be held liable

By Hillary Durgin

The recent seizure of two First Executive Corp. insurance company units has confronted employers with the prospect of billions of dollars in potential lawsuits.

State insurance regulators have seized the insurer's two largest units, Executive Life Insurance Co., Los Angeles, and Executive Life Insurance Co. of New York, Jericho, N.Y., to prevent their collapse and a run on their assets. Billions of dollars of potential losses on guaranteed investment contracts and annuities the Executive Life units backed with high-yield bonds are anticipated.

The losses could trigger lawsuits from pension plan participants claiming pension executives violated their fiduciary duties in purchasing the contracts, even though some insurance rating agencies rated the units AAA or A+ — the highest quality ratings — before downgrading them in January 1990.

The magnitude of potential lawsuits is unknown and depends on factors such as the size of possible investment losses, whether state guaranty funds are able to step in and whether employers can and will shore up participants' retirement benefits.

See **Lawsuits** *on page 33*

NEWS DIGEST

Cleveland-Cliffs' plan to acquire more iron ore mines has pitted the company against Tiger Management Corp. and its adviser, Providence Capital. Page 19.

SPECIAL REPORT: INTERNATIONAL REAL ESTATE

With a few exceptions, U.S. pension funds are taking a skeptical and cautious approach to global property investments. Page 21.

FINANCING

Long-term corporate bond issuance is enjoying a banner year thus far in 1991. Page 3.

INTERNATIONAL

Regional mandates are becoming more specialized as they attract more overseas equity assets. Page 3.

An exemption for buying and selling currencies through master trustees won't change current practices. Page 16.

REAL ESTATE

Investors in three RREEF closed-end funds can't agree on how to handle the maturing vehicles. Page 2.

Houston officials are investigating two investments by the Municipal Employees Pension System. Page 4.

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Adviser survey deadline draws near

Questionnaires for *Pensions & Investments'* annual survey of the largest international managers have been mailed. The completed forms, to be used for a special report published June 24, must be returned by May 12. If you have not received a questionnaire, or if you have any questions, contact Christine Philip, directory coordinator, at (312) 649-5217.

RREEF kills planned fund

Limited partners cannot agree on asset disposition

By Steve Hemmerick

SAN FRANCISCO — Principals with The RREEF Funds have killed what was supposed to be a precedent-setting plan on the handling of assets in maturing closed-end real estate funds in a depressed market.

Paul Sack, principal with the real estate advisory firm, said the plan was scratched because of disagreement among the 18 tax-exempt limited partners in three RREEF closed-end funds.

One client, said Mr. Sack, had threatened to sue RREEF if he didn't like the final plan.

RREEF had proposed reallocating a majority of the assets in the maturing funds — about $180 million — into a new closed-end fund RREEF would manage for another 10 years.

RREEF principals and limited partners will meet May 22 to discuss the maturing funds and current market conditions.

RREEF principals will recommend the limited partners avail themselves of a provision in the plan documents that would allow continuing the funds for two more years if members holding 60% of the assets agree to do so.

The principals will say this is a poor time to sell real estate, but it is "up to (the limited partners) to vote," said Mr. Sack. If the vote is to sell the assets, "we will do the best we can."

The three maturing funds are RREEF West III, West IV and Midamerica I.

The original commingled fund documents called for the sale of assets after a 10-year period. But RREEF principals and some clients with ownership interests in the funds believed they shouldn't sell in the currently depressed real estate market because they wouldn't get the best price.

Vacancy rates for offices are about 20%, and values have fallen for retail centers and for warehouses in recent months.

RREEF principals and some of the clients also wanted to keep the fund's properties because they were providing good returns — 13% compounded annually a compound annual total return during the life of the commingled funds.

RREEF principals couldn't simply transfer the assets of the three funds into a new, single fund because some of the clients wanted to sell the assets and get cash, if possible.

One of the clients reportedly interested in selling its share is the Telephone Real Estate Equity Trust, a wasting trust for the pension funds of American Telephone & Telegraph Co., New York, and the regional telephone operating companies.

TREET owns about one-third of the assets in each of the maturing RREEF funds, which gave TREET executives significant influence over the disposition of the three funds. Joseph Russo, investment director at AT&T, Berkeley Heights, N.J., couldn't be reached for comment.

Xerox Corp., Stamford, Conn., with $3.33 billion in retirement assets, also is believed to be one of the limited partners in one or more of the three maturing RREEF funds. Gerald J. Paolini, manager for trust investment strategy at Xerox, said he couldn't comment on his plan's position regarding the RREEF

See **RREEF** *on page 34*

Virginia said to hire for futures

By Trudy Ring

RICHMOND, Va. — The $10.6 billion Virginia Retirement System reportedly has hired three firms to run managed futures, with an initial allocation of $100 million that could grow to more than $1 billion, industry sources say.

The firms selected, sources said, are Kenmar Co., New York; Hart-Bornhoft Inc., Denver; and Ramsey Financial Co., Louisville, Ky.

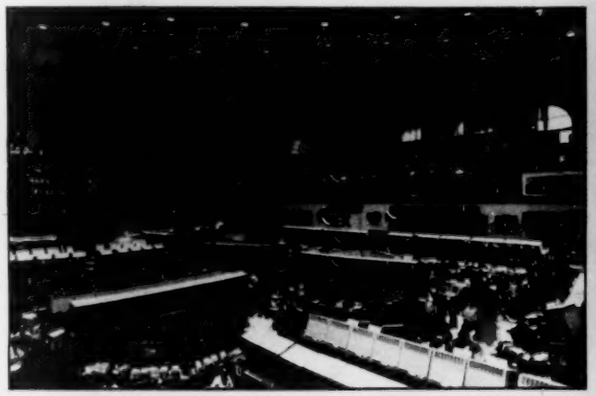
John McLaren, director of alternative investments for the Virginia system, said the fund had not made any such hirings but advised *Pensions & Investments* to check back in a couple of months. Futures industry sources, however, said the Virginia fund already had made its selections.

Of the firms reportedly hired, Kenmar officials declined comment and the others could not be reached for comment.

Managed futures firms treat futures as a separate asset class, not as a hedge or enhancement to a stock or bond portfolio, and use commodity futures as well as financial instruments. Generally, a firm running managed futures will act as a manager of managers, dividing assets among several commodity trading advisers.

Those in the managed futures industry say the strategy offers high returns with low correlation to stock and bond markets.

Few pension funds have invested in managed futures to date. Among those that have are the Eastman Kodak Co. pension fund, Rochester, N.Y., and the City of Detroit Retirement Systems. Also, the Echlin Inc. pension fund, Branford, Conn., invests in managed futures as one component of a balanced strategy. ■



Amex-traded companies could assign unequal voting rights to different classes of stock under an exchange proposal.

Investors pan plan for disparate voting

By Trudy Ring

Institutional investors reacted negatively to an American Stock Exchange proposal to broaden the authority of Amex-listed companies to set disparate voting rights for various classes of shares.

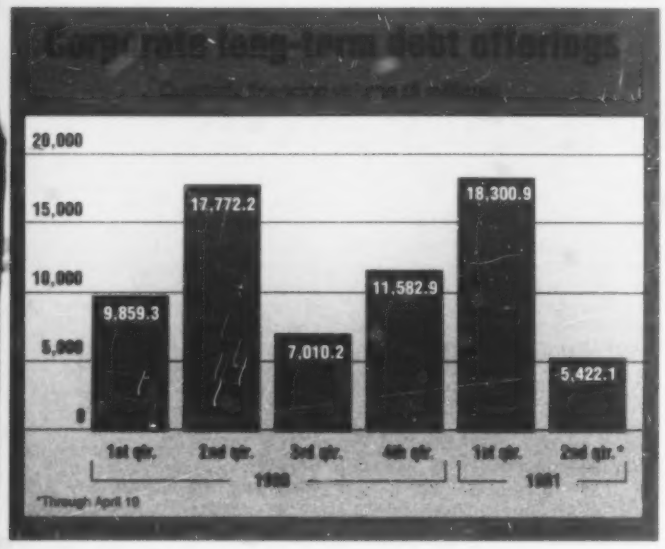
Amex officials contend the proposal would enhance, rather than weaken, shareholder power.

The proposal, subject to approval by the Securities and Exchange Commission, would let companies assign differential voting rights to various classes of shares if the arrangement is approved by two-thirds of all shares or a simple majority of shares not held by a controlling group. Amex rules already allow for disparate voting rights to some degree, but the new proposal would broaden companies' options considerably.

This is not the first time an exchange has sought permission to allow listed companies to change voting rights. A few years ago, when the New York Stock Exchange attempted to change its one-share, one-vote standard, the SEC ruled NYSE-listed companies could have different classes of stock with different voting rights under certain circumstances — for instance, if the company initially went public with more than one class of stock. Also, there was an explicit prohibition against transactions that would tend to disenfranchise current or future shareholders, such as offering an extra dividend to induce shareholders to exchange stock with full voting rights for that with lesser voting rights.

Last year, a U.S. Court of Appeals in the District of Columbia ruled the SEC did not have authority to make such a rule, but the NYSE then adopted the rule voluntarily, as did the National Association of Securities Dealers for its National Market System stocks.

See **Amex** *on page 35*



Excellent climate spurs bond blizzard

By Marlene Givant Star

More than 100 corporate borrowers — lured by low interest rates and tight spreads of corporate bonds to Treasuries — issued bonds of 10 years or more in the first quarter.

But the storm of activity soon might turn to drizzle. Some institutional investors, saying corporate bonds now look richly priced, are contemplating switching to alternatives such as mortgage-related securities.

(The daddy of all corporates in recent weeks, a $1.5 billion offering by RJR Nabisco Inc., was not considered a barometer of the bond market. The success of the seven-year bonds was based on the prospects of the company, not on conditions in the market, according to market participants.)

In the second half of 1990, the corporate bond new issue market was limp because of investor uncertainty about a recession and problems in the junk market. Both caused corporate spreads to widen significantly relative to long-term Treasuries.

But in the first quarter, the end of the Gulf war and a feeling that the recession would be short-lived boosted the potential for a rebound in corporate earnings and increased demand for corporate bonds from investment managers, mutual funds and insurance companies. Insurers began buying them as an alternative to real estate and mortgage-backed securities.

Corporations issued $18.3 billion in bonds of 10 years or more in the first quarter, surpassing the healthy $17.8 million issued in the second quarter of 1990. As of April 18, 31 more companies came to market with long bonds. They include Federal Paper Board Co. Inc., Alco Standard Corp., R.R. Donnelley & Sons Co. and Air Products & Chemicals Inc.

Given the low rate on long Treasuries, "our feeling is the market is clearly in need of yield. . . . That's what investors are looking for, something you can look through the recession with," said Seth H. Waugh, managing director in charge of corporate bonds at Merrill Lynch & Co., New York.

Grant Kvalheim, managing director and head of the capital markets desk of Merrill, said the RJR issue sparked interest in lower-rated investment grade credits with very good stories in terms of outlook, industry position and operating performance. One example is Oryx Energy Co., Dallas, which recently came to market with a $150 million issue of 10-year notes.

"Industrial issuers are favoring 10 years and longer because of absolute rate levels . . . It's been a trend throughout the first quarter. The average maturity is in the longer end vs. last year," Mr. Kvalheim said.

In another deal, Federal Paper Board, Montvale, N.J., in its first public bond issuance, issued $200 million of 20-year 10% debentures. It will use the proceeds primarily to pay down short-term and long-term debt, according to Roger Sanders, controller.

"We felt it was the right time. We've been putting this thing together. We were finally convinced by our bankers that this was the time to do it," he said. J.P. Morgan Securities Inc. was the lead underwriter.

Actually, the company might have borrowed at a slightly better rate in the private market. But "we felt it was time to get our name out in front of the public," Mr. Sanders said.

Another public issuer was Alco Standard, Valley Forge, Pa., which typically issues in the private market. The company borrowed $150 million in 10-year notes at 8⅞%. That Alco Standard is a rare name in the public bond market, plus its quality image and stable non-cyclical business, contributed to the issue's success. It was priced at 91 basis points over the 10-year Treasury, according to O. Gordon Brewer Jr., vice president-finance.

"This was one of the first straight bond offerings we've done in the public market," Mr. Brewer said.

Proceeds will be used to repay short-term debt, which the company wants to keep low until acquisitions, working capital or capital expenditures are required. "We're positioning our capitalization for the growth of the company. We expect all three business segments to grow. We're active in acquisitions and expect to continue to be," he said.

The company drew down a $300 million shelf registration to $150 million.

R.R. Donnelley, Chicago, also drew down a shelf when it issued

See **Bonds** *on page 35*

International niche soars

U.S. plans' regional investing grows to $8.2 billion

By Margaret Price

More international equity dollars are being pumped into country/regional investing than in any other international equity strategy. And the approach is becoming more tightly focused.

Data from InterSec Research Corp., Stamford, Conn., show a jump to $8.2 billion in 1990 from $2.3 billion invested by tax-exempt institutions in country/regional investing in 1988. Quantitative international equity management, which went to $4.1 billion in 1990 from $700 million in 1988, is growing faster, but has only half the commitments.

Initially, regional investing often meant separate portfolios for the markets of Europe, the Pacific Rim, and sometimes Japan alone. But as still more funds take that investing route, some are specializing even further within regions.

An investor might hire managers for the Pacific Basin-minus-Japan, or specifically value or growth managers within a region, or even separate managers for small- and large-capitalization stocks within an area. One unidentified pension fund hired Acadian Asset Management, Boston, this year to manage a portfolio of only German stocks.

Among those hiring regional managers in recent months were the District of Columbia Retirement Board, the Idaho Public Employees Retirement System and the Pacific Telesis Group and Shell Oil Co. pension funds.

Data from Eager & Associates, Louisville, Ky., underscore the trend. The firm's Tracker data base of money manager hires found, for the five months ended March 31, that fully one-third of the 86 international manager selections were for regional managers. Among funds of $1 billion and larger, the percentage rose to 45.5%.

Tracker found that, among six regional categories studied, 34.5% of hires were for an emerging countries mandate; 24.1% were for a Europe-only account; 17.2% were Pacific Basin accounts; 10.3%, for Japan; 3.4%, for Pacific Basin-minus Japan markets; and 10.3% were for a U.S. mandate hired by non-U.S. pension funds.

No comparisons with earlier periods were possible because Tracker only began following regional international investments in November.

"This is a rapidly growing segment of international investing," said Steven Golann, a director of Warburg Investment Management International Ltd., London. He believes regional investing "is likely to encompass 25% of new searches" for international money managers.

A variety of factors explain the rising popularity of regional international investing. Pension funds, especially larger ones, have become more accustomed to foreign investing generally, and are more willing to consider variations. They've also noticed variations in managers' performances: some managers perform better in some regions than others.

See **Niche** *on page 35*

Photo by Margaret Price

More U.S. pension funds are separating Japanese investing from the rest of the Pacific Basin.

Funds seek small-cap managers

By Margaret Price

Six months of strong performance by small-capitalization stocks has triggered a wave of new interest by pension funds and their consultants in this long-time laggard.

Believing small-cap stocks will continue to outperform larger stocks, some pension funds have hired or are searching for one or more small-cap managers. They include the Milwaukee County Employees' Retirement System, Fresno (Calif.) City Employees' Retirement System and the Maine State Retirement System.

More such hirings are expected later this year.

"We've definitely been seeing a lot more interest" in small stocks, said Frank Frey, managing director of Brandywine Asset Management, Wilmington, Del. "The week after the end of the first quarter, I got five times as many calls as normally come in from consultants asking for performance information and characteristics." Brandywine manages close to $30 million in small-cap equities.

Robert Brown, senior consultant with Mercer Asset Consulting in Chicago, calls small-cap investing "our single most popular area of interest at the moment with clients."

He said pension executives are most interested in initial outlays in small-cap stocks, followed by additions to their small-cap rosters and investments in foreign small-cap stocks.

Small-cap stocks generally underperformed larger stocks between 1983 and 1990, but began a strong comeback in October. Between Jan. 1 and April 22, the Russell 2,000 index — which holds companies with capitalizations of $15 million to $250 million with an average of $100 million — advanced 31.39%, more than double the 15.36% gain in the Standard & Poor's 500 Stock Index during the same period.

The over-the-counter market — which lists many small-cap companies — dipped briefly earlier this month, which many believers considered nothing more than a breather.

Henry Otto, chief investment officer for Brandywine's small-cap investments, linked the brief downturn in the NASDAQ Composite Index largely to profit taking in technology issues.

Foreign small-cap stocks have had long-term stellar performances.

See **Interest** *on page 34*

BENEFITS

Improved benefits put umpires back behind the plate

■ Play ball!

Major league umpires returned to work April 8 and 9 with a new four-year contract that provides a cost-of-living increase for their pensions and improved surviving spouse benefits.

The pension boost was one of a number of monetary issues resolved April 8, opening day for 16 teams in the American and National leagues.

The umpire's had gone on strike April 6, and replacement umpires worked the last two days of the exhibition season and one of the eight opening day games. A full contingent of Major League Umpires' Association umpires worked the nine games April 9.

The 60 active umpires and undetermined number of retired umpires gained a cost-of-living pension increase capped at 5% per year for the duration of the four-year contract. The current pension formula calls for vested umpires to earn $2,000 per year for each year of credited service.

The agreement also calls for survivor benefits to be increased to 100% from 50% of earnings.

The Major League Umpires Association had pressed for bigger increases in the negotiations, according to Bob Kheel, an attorney who handled the negotiations for the American and National leagues. The two leagues each pay into the multiemployer defined benefit pension plan. Mr. Kheel declined to disclose the total assets in the pension plans. Pat Campbell, associate with Richard Phillips, executive director of the Umpires Association, said he didn't know how big the plan was, how much the settlement cost or how many retired umpires there are.

The four-year contract also grants salary, per diem, medical, insurance and vacation increases.

An increase in pension benefits is now in the lineup of major league baseball umpires after the early April strike was settled.

PENSION FUNDS

Callan to take a thorough look at Vermont systems

■ The State of Vermont Retirement System has hired Callan Associates Inc. as investment consultant, according to Ronald Boucher, deputy treasurer and director of investments.

Over the next 18 months, Callan will help the state's three pension funds conduct a total review of goals and objectives, an asset/liability modeling study and a long-range plan for how the fund's assets need to be managed to meet liabilities.

Mr. Boucher anticipates moderate restructuring of the investment portfolio as a result of the analyses. The firm will look at Vermont's 5% exposure to alternative asset classes, which include real estate and GICs, to "ensure that it's performing as it should be."

Two equity and two fixed-income managers run the employees', teachers' and municipal funds. The employees' and teachers' funds each has an international equity manager.

The system's former consultant, Becker, Burke Associates Inc., Chicago, "had provided a really solid foundation for the '90s, but the special skills of Callan best matched the needs of the state of Vermont," Mr. Boucher said.

FINANCING

Private placement putting new spin on old company

Willcox & Gibbs inc., makers of industrial products and covered yarn, placed $50 million in notes with Prudential Capital Corp.

■ A turn-of-the-century sewing machine manufacturer that once competed head on with Singer & Co., has spun out a $50 million private placement.

Founded in 1866, Willcox & Gibbs Inc., now a distributor of industrial products and a manufacturer of covered yarn, has placed $50 million of 9.78% 10-year notes with Prudential Capital Corp.

The proceeds will be used to reduce short-term debt.

"The alternative would have been to bring in an investment banking group that would package something for us and charge a lot of money," said Richard Mackey, president. "This was a more economical way to do a deal," he added.

Covered yarn — primarily used to manufacture panty hose — is made by wrapping nylon around Spandex at very high speeds.

Willcox & Gibbs had $568.1 million in revenue and $5.5 million in earnings in 1990.

SOFTWARE

Bonds, stocks added to data base

■ Lotus Development Corp., Cambridge, Mass., has added two analytical investment CD-ROM packages to its One Source data base package.

Packages covering international equities and domestic fixed-income analysis were unveiled in the first quarter, according to Ken Grunzweig, Lotus vice president.

The international equities package provides fundamental data on 10,000 companies worldwide in 28 countries. Financial data include balance sheet information, income statements, cash flow, corporate demographics and current and historical earnings estimates.

The package includes textual information on company-specific accounting practices, financial results, operating statistics and capital structure information, said Mr. Grunzweig.

All financial data are available in local or cross-currency basis. Currency conversion capability is included.

The fixed-income package allows bond managers to enhance strategic and tactical decision-making by providing information on 35,000 bond issues in the U.S. corporate, Treasury and agency sectors.

The data base includes swap, yield spread and portfolio horizon analysis.

Both are fully integrated with the Lotus 1-2-3 spreadsheet and run on desktop PCs as a stand alone or through local area networks. The data are updated weekly.

The stand alone subscription price for both packages is $20,000 per year and includes the CD-ROM reader and the Lotus One Source data base platform.

S&P 500 industry sector returns

	Annualized returns* 1988-'90	1988-'90	1990
[illegible]	[illegible]	[illegible]	[illegible]
Consumer discretionary	11.7	11.9	–9.5
[illegible]	[illegible]	[illegible]	[illegible]
Energy	17.4	19.4	1.4
[illegible]	[illegible]	[illegible]	[illegible]
Health	22.0	24.0	16.5
[illegible]	[illegible]	[illegible]	[illegible]
Producer durables	10.8	8.8	–5.6
[illegible]	[illegible]	[illegible]	[illegible]
Transportation	5.7	8.0	–14.3
[illegible]	[illegible]	[illegible]	[illegible]

* Returns are capitalization-weighted for S&P 500 stocks
Source: SEI Corp., Wayne, Pa.
Graphic by John Hall

INVESTING

Growth stocks, health issues lead

■ Growth managers and health industry stocks produced the best returns in 1990, according to SEI Corp.'s Performance Review.

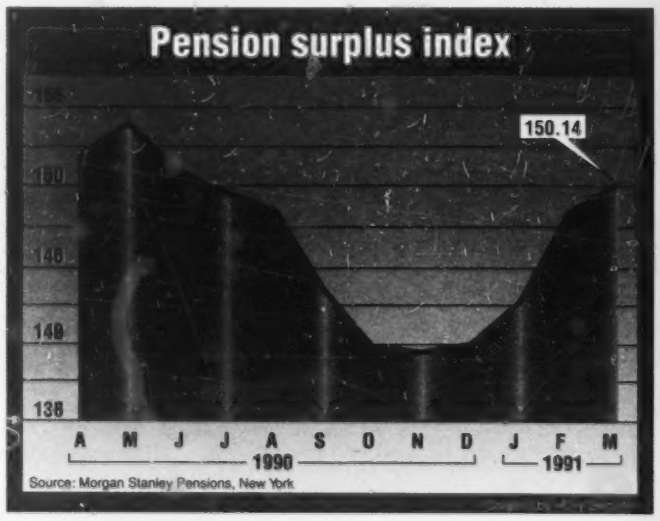
Measuring the performance of six distinct equity management styles, SEI ranked growth managers first with a median return of –2.1% for the year ended Dec. 31. The growth style also led in 1989.

The concentrator style, which focuses on a particular sector or in small-capitalization stocks, fell from second place in 1989 to sixth with a return of –8.8% in 1990.

For the year, the Standard & Poor's 500 Stock Index returned –3.1%.

The health and consumer staple sectors, both considered recession-resistant, were two of the three industries that moved up.

The health sector grew 16.5%, while other sectors like finance and building fell to –19.7% and –20% respectively. Consumer staples grew 7.3% and the third industry, energy, grew 1.4% according to the report.



U.S. funds wary of overseas realty pitch

Poor domestic market keeps skepticism at forefront

By Steve Hemmerick

Pensions fund pioneers investing in international real estate are far ahead of the masses — so far ahead it seems like the masses have lost the trail.

U.S. institutional investors are displaying even more skepticism and caution toward international real estate investment than they showed toward domestic real estate and international stock and bond investing a decade ago.

At a time when the London office market is showing its highest yields in 15 years, U.S. tax-exempt investors are virtually ignoring it and other European major cities as targets for real estate investment.

Tax-exempt investors eventually accepted domestic real estate and international securities investing after several years of resistance. The question is whether these investors eventually will embrace international real estate investing, or whether the risks and difficulties will continue to be perceived as greater than the expected benefits.

The evidence suggests international real estate investing will be a very hard concept to sell for several years. Even if tax-exempt investors follow the normal acceptance curve, the real estate investment managers marketing this product will not see significant asset flows for at least another five years.

The move up the acceptance curve could take even longer because marketers have suffered a loss of credibility with their domestic real estate investments.

Meanwhile, investors could be missing a significant opportunity. Real estate advisers report the bottoming London property market, which holds almost one quarter of the value of the world's available offices, is ripe for investment.

Yields at the end of 1990 for prime London office property reached about 9.6% in the city and 8% in the West End, and about 7% in the United Kingdom overall, according to Investment Property Databank, London.

Those are the highest yield levels since the mid-1970s crash in London real estate, according to Jones Lang Wootton Realty Advisors, New York.

But only a very few U.S. pension fund executives are interested in London or any other real estate outside the United States. That's why only two of eight real estate money managers offering commingled international realty funds have signed an clients.

Any speedy growth in the rate of international property investment is doubtful for a number of reasons:

- Pension funds are wrestling with poorly performing U.S. real estate portfolios. Some are cutting back their allocations to real estate, and have little appetite for additional real estate anywhere.
- The early experience of JMB Institutional Realty Corp.'s Randsworth PLC deal — one of the few completed international real estate deals for U.S. pension funds — has not been a stellar one.
- European property prices are higher than U.S. prices, a deterrent especially when the U.S. experience has been poor.
- U.S. investors are unfamiliar with real estate markets, practices and legal structures in the diverse European markets.
- Some investors think locals would have an advantage over Americans in any transaction because of their familiarity with their own real estate markets.
- With international investing comes a currency risk.
- The possibility of political instability is unsettling to some investors.

Only 2% of 1,016 corporate pension funds and 3% of 310 public funds have any international real estate investments, consultants Greenwich Associates, Greenwich, Conn., reported at the beginning of 1991. And only another 2% of corporate funds and 4% of public funds indicated they plan to start investing in international real estate.

U.S. real estate investment clearly has disappointed pension executives, and they seem unwilling to risk another disappointment overseas.

American tax-exempt investors asked for — and were promised — long-term domestic returns substantially over the rate of domestic inflation.

But the widely followed Russell-NCREIF index reported that for 1990, pension investors got a total return of 1.3% on domestic core real estate, part of a slide that has been going on for several years.

And investors are shoring up to avoid future troubles with U.S. property not now underperforming, while others are pondering what to do with properties in closed-end funds maturing in a depressed U.S. market.

Investment advisers marketing European real estate investment said U.S. pension executives' warming interest in international property chilled in 1990 as commercial property prices began to fall overseas and domestic property prices fell further at home.

They also said it was unfortunate that some U.S. pension funds bought Randsworth PLC at virtually the crest of the market in the United Kingdom in 1989.

Randsworth, a publicly traded real estate company with some 35 properties in London's West End taken private by JMB, has become a symbol to numerous U.S. investors of the difficulty of international property investment.

Property return figures indicate U.S. investors did buy into Randsworth as the London West End property market was booming and prices for properties were high. Their attention to European property had been sparked by increasing rents and prices there.

According to the Investment Property Databank, properties in the West End of London had a total return of about 37% in 1987 and 40% in 1988.

But in 1989, as U.S. tax-exempt investors pumped $340 million (including $50 million from JMB) into West End properties to take Randsworth private, the total return dropped to 18%.

In 1990, West End properties had a total return of −7.5% while City of London properties returned −14.1%.

The value of Randsworth fell 6%, but investors took a much greater loss because about one-half of their investment was in pound-denominated floating-rate debt. Interest payments rose as interest rates climbed in the United Kingdom. In 1990, investors in Randsworth paid down about one-half of its existing debt.

Randsworth is more a financing structure problem than a real estate problem, said Charles Grossman, a managing director with Jones Lang Wootton Realty Advisors, New York.

Meanwhile, U.S. pension executives are undergoing an education process with international real estate.

While U.K. pension funds began international real estate investment in the late 1950s, U.S. pension funds haven't had to do so because their own country is so much larger than most European countries.

Plus, many pension funds didn't even invest in any kind of real estate until the late 1970s or early 1980s. Real estate is still unfamiliar to them.

The $62 billion California Public Employees' Retirement System commissioned a study of international real estate investing from the Roulac Consulting Group. The study noted many of the potential problems in real estate investment in lands foreign to Americans.

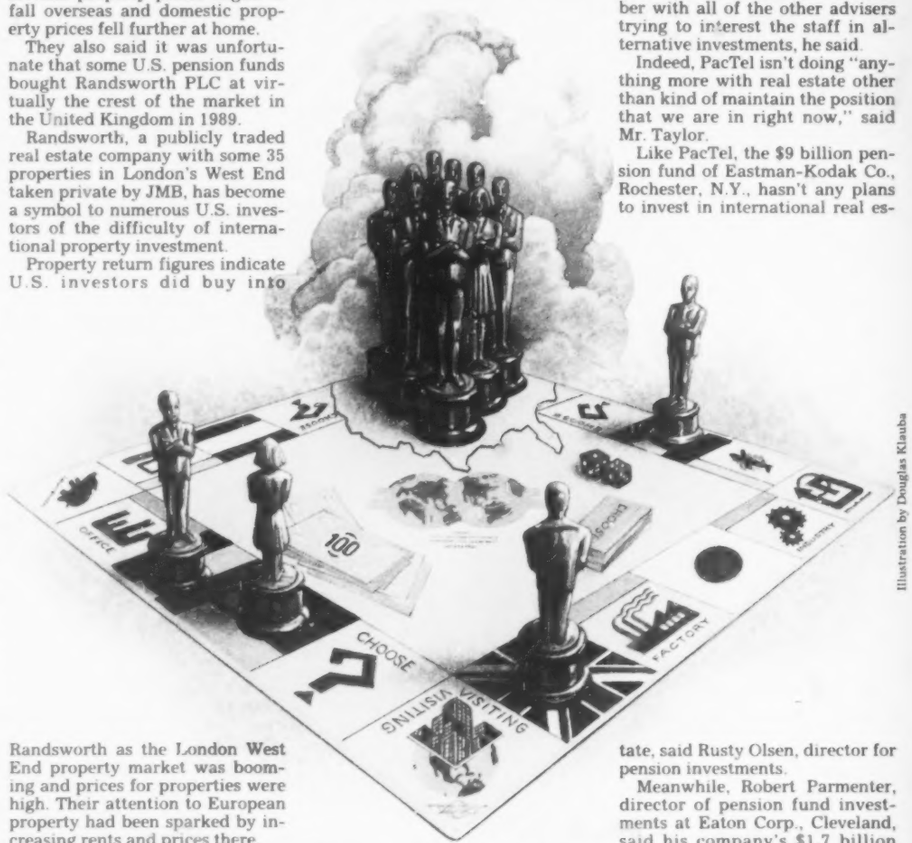


Illustration by Douglas Klauba

The study, delivered in February, noted American investors are unfamiliar with a foreign country's investment environment. They don't know many of the important investment networks and relationships, and they are concerned about potential economic and political instability. Spain, for example, was considered a fascist state ruled by a dictator until recently, and France has at times rebuffed foreign investment.

Currency exchange rate volatility, inconsistent property design and construction quality, tax policy and regulatory differences, and unfamiliar employment and demographic information represent other problems for the American investor, the report noted.

For most U.S. pension investors, investment in international property doesn't seem imminent. And when questioned, they generally cite some combination of the above reasons.

E. Douglas Taylor, executive director for investment management at Pacific Telesis Group in San Francisco, said PacTel's $11 billion pension plan isn't considering investing in foreign real estate. Pacific Telesis has between 5% and 10% in real estate.

"It is not something that we are currently thinking about, and what we do two years from now, we don't have a crystal ball. There are a lot of people talking about it. I haven't seen a lot done, although my network isn't perfect," Mr. Taylor said.

Money managers marketing international real estate programs to PacTel staff must take a number with all of the other advisers trying to interest the staff in alternative investments, he said.

Indeed, PacTel isn't doing "anything more with real estate other than kind of maintain the position that we are in right now," said Mr. Taylor.

Like PacTel, the $9 billion pension fund of Eastman-Kodak Co., Rochester, N.Y., hasn't any plans to invest in international real estate, said Rusty Olsen, director for pension investments.

Meanwhile, Robert Parmenter, director of pension fund investments at Eaton Corp., Cleveland, said his company's $1.7 billion pension plan has been getting out of real estate because the pension committee doesn't think real estate is a competitive asset class.

Eaton's plan now only has 2% or 3% in real estate, mostly through limited partnerships, compared with 15% to 20% in the past.

"We have had a phase-out program, but we are not rushing to get out of real estate," said Mr. Parmenter.

About international property investments, Mr. Parmenter said, "We haven't considered it at all, and we haven't had anybody try to market it to us. That's probably because whenever somebody calls me with a real estate investment, I point out to them that we are disinvesting."

At Southwestern Bell, St. Louis, Stan Fujarski, director of pension investments administration, said his $8.3 billion fund last year reduced its allocation to real estate to 8% or 9% of assets from 10%.

Consequently, said Mr. Fujarski, there's no immediate need to invest in international real estate.

At California Employees, investment committee members weren't in agreement on the need for a policy on international real estate investment. Said Charles Valdez, chairman of the investment committee: "It should be axiomatic that we have a policy."

See **Overseas** *on page 22*

Efficient Real Estate Securities Portfolios

Although real estate stocks do not offer the same risk-return profile as direct property investments, property securities do reflect underlying real estate market fundamentals. Based on returns from 1985 — 1991

	Investors risk-return preference		
	Minimum risk lowest return	Moderate risk and return	High risk and return
Volatility	10.4	12.0	16.2
France	53.0	31.0	1.0
Japan	18.0	37.0	57.0
Spain	1.0	11.0	19.0
United Kingdom	7.0	—	—

Source: Salomon Brothers Inc. | Percentages may not add to 100% because of rounding.

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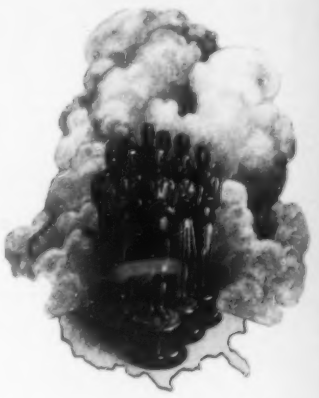
Overseas



Continued from page 21

But committee member Jake Petrosino said: "I am very, very concerned as one board member that the attendant costs in developing an expertise and relationships are not cost effective, that there are better investments in real estate in the United States and certainly possibly in California and other areas. I do believe I am not interested personally as a board member in expanding the asset allocation (to international) real estate."

Just having such a policy would pressure advisers and staff to invest in international real estate, Mr. Petrosino said.

He referred to U.S. investors' understanding of international real estate markets as a virtual "black hole" compared with what the Europeans know about their own markets. U.S. investors, Mr. Petrosino argued, would be "significantly disadvantaged" in making property investments overseas.

In a split vote, the California Employees investment committee decided to adopt a policy that will allow the board to at least look at international real estate.

One factor that might have carried the vote is the pension fund already owns international real estate through its investment in JMB's purchase of Cadillac Fairview Corp. Ltd. in 1987.

JMB and 39 institutional investors acquired Cadillac Fairview, Toronto, in a $5.8 billion transaction. The Cadillac Fairview portfolio consists of 31.5 million square feet in 56 retail properties in Canada and the United States, and 13.5 million square feet of space in 20 office and mixed-use properties in Canada.

Despite the skepticism among some investors, there are sound reasons for investing in international real estate:

- The U.S. real estate market is only a small fraction of the world real estate market, and therefore the non-U.S. market must hold many opportunities for successful investing.
- The non-U.S. market offers opportunities for wider diversification of a real estate portfolio.
- As the Roulac report points out, "Due to the continuing globalization of the world's economy, diversification strategies demand that portfolios more closely reflect the relative distribution of global wealth."

Real estate advisers think it is inevitable that diversification-hungry American investors will enter the international property markets in big numbers because the domestic market is too small to provide all the opportunities.

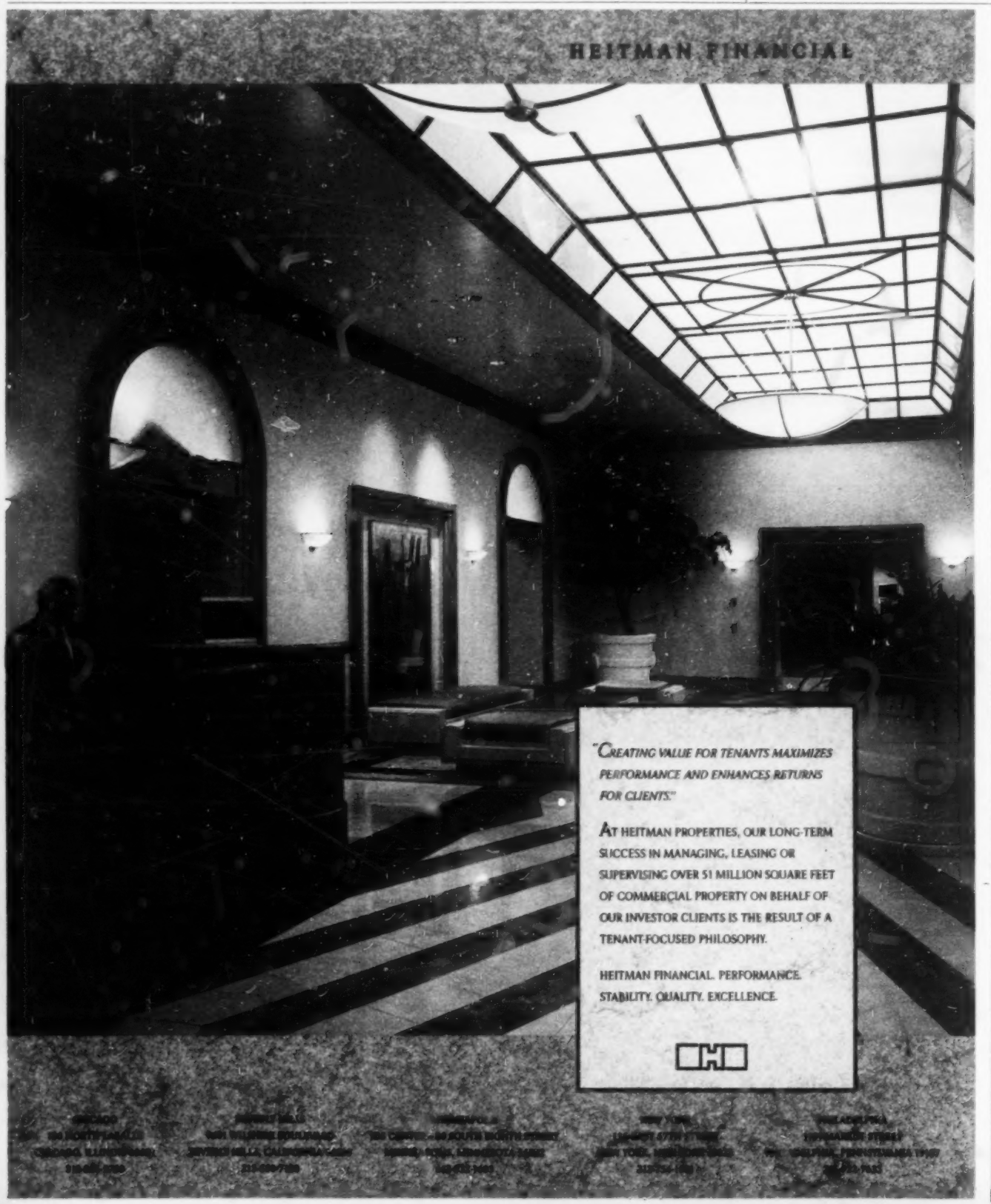
North America represents only 38% of the value of all available office properties, excluding Tokyo, according to Salomon Brothers Inc., New York. When Tokyo is included — although it is difficult for any but the Japanese to invest there — North American office properties represent only 13% of the value of the world market.

Real estate managers have focused on Europe as the primary target for investment of American pension dollars. Property markets in major European cities are huge.

Paris has about 360 million square feet of office space; London, 260 million; Frankfurt, 90 million; Brussels, 70 million; and Amsterdam, 50 million.

Manhattan has only about 150 million to 200 million square feet, but metropolitan New York, including parts of nearby New Jersey, has more square footage of office space than most European cities, between 300 million and

See **Overseas** *on page 24*



Overseas

Continued from page 22

400 million square feet.

But real estate in some European cities is much more expensive than properties on New York turf, according to Jones Lang Wootton's Mr. Grossman. Some London property rents for $100 a square foot per year.

Advisers agree total U.S. tax-exempt investment in international property in cash totals only about $3 billion, and only $1 billion when Canadian property investments are excluded.

Those figures pale besides the estimated $50 billion U.S. tax exempt investors report investing in international stocks and bonds.

One tax-exempt investor who is seriously considering investment in international real estate is the $2 billion Rockefeller Foundation, New York.

David White, chief investment officer, said the foundation is studying the area, but has not made a decision.

Mr. White lived in Europe for about two years, and has continued to make several trips there each year, including to meet with real estate managers. Consequently, it is not unfamiliar territory to him.

He believes the currency exchange rate problem is not an issue for the foundation because it has to deal with that problem for international stock investments.

"Currency is a separate issue. My view is that we hedge the currency, but that is a different decision than going into European real estate just as with stocks or any other asset class. It is an issue, but it is no different an issue than you face with any other asset, bonds or stocks."

The foundation's primary interest in investing internationally in real estate is diversification, a greater investment return and less of a chance of overbuilding because European lenders are more disciplined than their U.S. counterparts.

He thinks the European economy could rev up with greater economic unification there in 1992.

About whether he will actually invest, he replies, "I have a definite interest. It will be a strategy call." He added, "If we go, we are going to go indirect; it will be in a closed-end fund."

Despite the apparent lack of interest on the part of pension executives, real estate investment organizations are still establishing and marketing products.

Jones Lang Wootton has formed the JLWRA Europe Fund I for limited partnership investment across Europe. The fund is seeking $500 million in initial capitalization, and an eventual capitalization of $1 billion.

The minimum contribution is only $5 million, but so far no U.S. investors have contributed to the fund although it has been marketed since last October.

Prudential Realty Group, Newark, N.J., already has contributed, through general account assets, part of the $2 billion with seven foreign investors in the Prudential Global Real Estate Investment Fund. While the fund has contributions from pension funds, none is from American pension funds.

To encourage investment, Prudential is planning to let pension funds co-invest as a group, with contributions as little as $50 million.

Banque Indosuez, a private French bank, is offering a fund for property investments that will invest in France, Germany, Belgium, Denmark, Italy and Spain. The fund will have its first closing in about 90 days, and it will have an estimated $130 million in subscriptions. The money will come from seven subscribers, six of which are insurance companies. But none of the subscribers is American.

William Darrow, a senior vice president with Banque Indosuez, believes about one-half of the money will come from the Far and Middle East.

Baring Institutional Realty Advisors is offering the Baring International Property Fund I, a real estate investment trust. It will invest primarily in the United Kingdom through its affiliate, Baring Houston & Saunders, London.

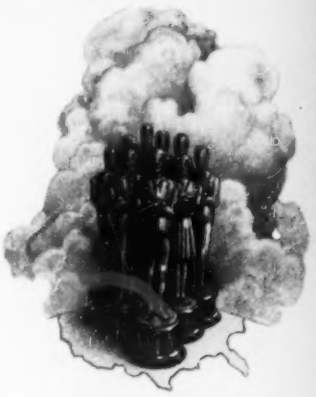
While three U.S. pension funds are being sent commitment papers, as yet none has invested.

Equitable Real Estate Investment Management, New York, is offering its Southern European Real Estate Fund. It will invest in properties in France, Spain and Italy. Equitable executives say the fund has "several" U.S. pension fund investors, but they wouldn't give any details.

But most clients, said Equitable executives, are in the policy formation stage and doing little actual investment.

JMB had been strongly considering offering a commingled real estate fund for investment in Europe this year. But that seems less likely now.

Jerry Claeys, JMB Institutional Realty chairman, said the market



for international real estate investment is "cooler than it was." He added: "We are seeing more caution from investors than we have seen in the past."

Fiduciary Trust Co. International, New York, reports it should have a first closing for its offering, TransEuropean Property Limited Partnership, in May with about $100 million. Two of the investors are U.S. pension funds.

The fund will invest in the United Kingdom, Netherlands, Germany, Spain, Belgium and other countries. MIM Property Management Services, London, a subsidiary of INVESCO MIM PLC, will be the general partner and asset manager of the commingled fund.

GIM Global Advisors, Newark, N.J., a fully owned subsidiary of G.I.M. (B.V. Algemeen Vermogensbeheer), one of the Netherlands' largest independent money management firms, has one $15 million U.S. separate account that invests in real estate securities.

The advisers realize they will be plowing hard, low-yielding fields for some time to come.

Some say American investors might be waiting for a better track record, and long-term favorable statistical data before they invest in London, which would be the most likely first step.

Ironically, waiting until the data look good could result in more bad return numbers for U.S. investors when they do invest in international property.

Many American investors have had a string of deals where they invested at the top of the market.

U.S. pension funds invested massively in domestic office buildings in the late 1970s and early 1980s when the track record was good and prices were high. As investment returns for office buildings fell in the mid-1980s, investors chased after the high returns generated from large retail properties and warehouses.

But retail property returns weakened in 1990 and warehouse investment returns soured. In 1990, retail properties had a 0.2% return for the fourth quarter and a 6.2% return for the calendar year. Warehouses produced a total return of −1.4% in the fourth quarter of 1990 and had a 2.2% total return for the year.

All major property types had a 1.3% return in 1990 in the United States.

"Anytime your decision-making process involves looking at historical data, there is always a risk you won't invest until the data look good, and therefore you go in at a peak," said Jones Lang Wootton's Mr. Grossman.

Investing at a peak apparently could happen for international investments as U.S. investors wait for the right time. But they seem more than willing to take that risk while they familiarize themselves with the opportunities and the risks of investing overseas.

Simply put, they would prefer an opportunity loss to a real loss. ■

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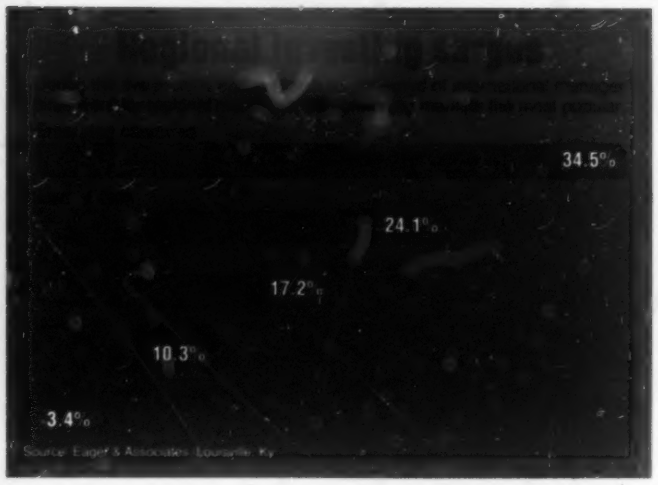

Niche

Continued from page 3

On the whole, some recent data suggest regional specialists perform better than international generalists. RCB International Inc., Stamford, Conn., a manager of managers, compared the performance of its team of six generalists to that of a team of 14 country and regional specialists. The result: between October 1986 and March 1991, including fees and expenses, the specialists' net annual return was 5.1 percentage points higher than that of the generalists'.

"Plan sponsors find it intuitively compelling to hire specialists," said Glenn Davis, a partner with Eager & Associates.

Pension funds use regional strategies as additions to, or complete or partial replacements for, their broader international assignments.

Recently, the approximately $1.6 billion District of Columbia Retirement Board chose to scuttle the indexing portion of its foreign investments and shift to an all actively managed style. The new program will include 25% of international investments in a Europe-only program, 25% in the Pacific and the remainder in a core actively managed, broad international assignment, said Adrian P. Anderson, the fund's executive director.

The fund has tapped Schroder Capital Management International, London, for a new $35 million Europe-only portfolio; Schroder already manages assets for the fund in a broader international style. The fund is now searching for a Pacific Basin manager, said Mr. Anderson.

Assets for the Europe account will come from cash flow, while the Pacific account will be financed both by cash and assets from the indexed program.

Last fall, the $1.9 billion Idaho Public Employees Retirement System switched from a Morgan Stanley Capital International Europe Australia Far East Index international program to a regional strategy, said John Hart, chief investment officer. In the process, the fund terminated one of its three EAFE managers and changed the mandates of the other two — one to Europe-only and the other to Japan-only.

The fund hired four additional international managers: Globe Finlay Inc., New York, for Europe only; Prudential Asia Fund Management Ltd., Hong Kong, Southeast Asia minus-Japan; BEA Associates, New York, emerging markets; and Dillon, Read International Asset Management, London, undervalued securities in EAFE countries.

The two Europe-only managers have different strategies. While one follows a bottom-up approach seeking stocks that work well in geographic biocs, the other manager "is looking at individual countries and economic cross currents in them" and investing with large- and small-cap stocks, said Mr. Hart.

The regionalized approach gives a fund more investing predictability and control, he said, ensuring the fund will be invested around the world in "a systematic process."

Also last fall, the almost $10.4 billion fund of Pacific Telesis Group, San Francisco, expanded its regional investing, begun in 1988, by hiring Acadian Asset Management and Nomura Capital Management, Tokyo. Acadian was hired to serve as a Europe-only manager along with HD International, London, and Morgan Grenfell Investment Services Ltd., London.

PacTel added Nomura to its cadre of Japan-only managers that already included Walter Scott & Partners Ltd., Edinburgh, Scotland, and Yamaichi International Capital Management Co., New York. The fund's other regional manager is Rowe Price-Fleming International Inc., Baltimore, handling investments in the Pacific Basin outside Japan, said Jerry Koch, PacTel's director of investment administration.

At the end of last year, the fund's regional international investments totaled slightly less than one-third of its $1.84 billion in foreign investments. ■

Leveraged ESOP put on hold

CINCINNATI — Cincinnati Bell will not proceed with the formation of a announced leveraged employee stock ownership plan because of market conditions.

In June 1990, the company announced it would spend about $72 million to acquire 3 million newly issued common shares, or slightly less than 5% of outstanding common shares. The company had filed a shelf registration for the issuance of up to $75 million principal amount of 10-year notes to fund the purchase of the shares to establish the trust during the third or fourth quarter of 1990.

But market conditions were "not what we were looking for," said Cynthia Cantoni, a spokeswoman, adding that no decision has been made as to whether Cincinnati will form a LESOP at a future date. ■

Bonds

Continued from page 3

$150 million in 30-year 8⅞% debentures. "We did a $500 million-plus acquisition last September. Two of the payments ($150 million each) were due this year, one in May and one in October," said Ronald Eidell, vice president and treasurer of R.R. Donnelley. The shelf, filed a year ago, was drawn down from $500 million.

Donnelley issued 30-year bonds because it was financing the $525 million purchase of Meredith Burda Cos., a printing company with very long-term assets and contracts. Meredith Burda has $530 million in sales.

The company probably will finance the other payment out of a combination of commercial paper and medium-term notes, although it has no medium-term notes program in place as yet.

On April 17, Air Products & Chemicals, Allentown, Pa., issued $100 million of 30-year 8¼% debentures. Marshall Sullivan, assistant treasurer, said the issue was long because "our assets tend to be long lived, and whenever we can finance at an attractive rate," the company finances at long maturities. Proceeds were used to repay commercial paper outstanding and for general corporate purposes.

Investor demand for corporate bonds improved at the end of 1990 as prices of corporate bonds had cheapened dramatically and investors' economic outlook brightened. Supply then picked up, as low interest rates, tightened spreads and investor interest lured many corporate issuers to market. That rush might have inflated prices, some investors said.

"For investors the market isn't as attractive as it once was. Spreads have tightened a significant amount," said Michael Gray, portfolio manager at Fidelity Investments, Boston.

The most dramatic example is average quality BBB-rated bank bonds. Spreads tightened 200 to 300 basis points late in the first quarter as the outlook improved for banks. In the fall, "no one would touch banks with a 10-foot pole," Mr. Gray said.

Fidelity has been buying corporates selectively. Since April its purchases have included RJR Nabisco's seven-year senior bullets and the bonds of The Pep Boys, Continental Bank Corp. and Wal-Mart Stores Inc.

"Bonds have rallied based on a hope the economy will turn. Maybe it won't turn as fast as people think. Maybe now's a good time to scale down corporates," Mr. Gray said.

Investors could take advantage of the current tight spreads to upgrade to higher-quality corporates, move back into mortgages or buy Yankee bonds.

While BBB corporates were priced at 200 to 250 basis points over Treasuries in January, the spread is now only 175 basis points. The spread on 10-year AA-rated Yankee bonds has tightened only slightly to 85 basis points from 100, Mr. Gray said.

One firm not hot on the corporate bond trail is Chancellor Capital Management, New York. "There's a tremendous amount of supply and billions more to be issued in the coming month, but we haven't been buying," said Patrice Pancza, vice president and portfolio manager. She noted the firm believes the recession hasn't run its course and is thus buying corporates very sparingly.

Chancellor is focusing on high-quality, shorter-term, non-bank financial paper as opposed to industrial credits. It is forecasting an end to the recession by the end of the year.

In the first quarter, selectively purchased longer to intermediate corporates, including Wal-Mart's 20-year non-callable bonds. ■

Amex

Continued from page 2

The Amex proposal differs from what the NYSE and NASD adopted in that it would not limit the circumstances in which companies could have varying classes of stock with varying voting rights and does not have a specific prohibition against disenfranchising transactions, said James Heard, senior adviser to Institutional Shareholder Services Inc., Washington.

Several institutional investors said they hadn't studied the Amex proposal in detail, but their initial reaction was negative. "We are a firm supporter of the one-share, one-vote concept, so to the extent that the proposal controverts that, we would oppose it," said Kayla Gillan, assistant general counsel at the $64 billion California Public Employees' Retirement System, Sacramento. System officials will study the proposal when the SEC releases it for public comment and make appropriate comments then, Ms. Gillan said.

The $8.8 billion State of Connecticut Trust Funds likely will write to the SEC to voice its disagreement with the proposal, said Maryellen Andersen, investor and corporate relations director. "We don't agree with disproportionate voting rights," she said. "We agree with one share, one vote."

Even though institutions do most of their trading on the NYSE, not the Amex, it's important to stand up for one share, one vote everywhere, she added.

An SEC spokeswoman said last week the agency had not yet received the Amex proposal. Once such a proposal comes in, the SEC usually acts on it within 90 days.

James George, investment manager at the $12 billion Oregon Public Employes Retirement System, Salem, said he hadn't seen the Amex proposal but is generally opposed to concentration of shareholder voting power. "I would be very surprised if non-controlling shares would vote in favor of that," he added.

Bob Shabazian, Amex assistant vice president-corporate communications, said the proposal actually would allow companies and shareholders increased flexibility, because they would have the authority to approve or disapprove a change in voting rights. "We feel that shareholders should have a say in what their company does."

Mr. Heard, however, said this power is illusory; there's nothing to keep companies from offering incentives, such as extra dividends, to induce shareholders to disenfranchise themselves.

Mr. Shabazian also said the proposed rule would provide protection for shareholders by requiring that all companies with multiple classes of stock have independent directors constituting at least one-third of the board or, alternatively, that the holders of the class of stock with lower voting power have the right to elect at least one-fourth of the board.

Although some observers have seen the proposal as a way for the Amex to induce more companies to list on it, Mr. Shabazian said this is not the case. The Amex panel that formulated the proposal, later approved by the exchange's directors, just saw it as a benefit to shareholders, he said.

Current Amex rules allow companies to list shares with disparate voting rights but only if no class of stock has voting power more than 10 times that of any other class, Mr. Shabazian said. Also, current rules prohibit non-voting stock. Companies that already have multiple classes of shares would be grandfathered and not required to obtain additional shareholder approval for shares outstanding. ■

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AT DEADLINE

Confidential voting adopted

Hercules Inc. has become one of an unprecedented number of companies to adopt a policy of confidential voting this proxy season. The move came in response to a shareholder resolution sponsored by the Pennsylvania Public School Employes' and the California Public Employees' retirement systems.

Household does placement

Household Global Funding Inc. has privately placed $80 million in term-preferred stock under the SEC's Rule 144A.

The issue is backed by the parent company, Household International Inc., which has committed to own a majority of the voting capital stock of HGF, to maintain a minimum net worth of $50 million at HGF and to require HGF to maintain bank lines so the company can pay dividends on the preferred stock.

Funds shift assets

The $4.2 billion Los Angeles Fire & Police Retirement System hired The Boston Co. for a $450 million large-capitalization equity yield account. The money will come from existing large-cap equity managers, none of which was terminated. The fund also took $80 million from cash and allocated it to its high-yield bond managers, Cypress Capital Management and Magten Asset Management. The system's three international managers — Oechsle International Advisors, Nomura Capital Management and Hill Samuel/Investment Advisers — each will receive an additional $26 million; that money will come from its small-cap managers. . . . The $40 billion New York City Retirement Systems committed

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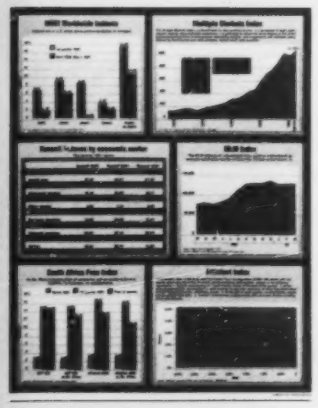
INSIDE



It's new and improved

The Efficient Index and the MLM Index make their debut as *Pensions & Investments* unveils its new Statistically Speaking page, revamped to give readers more information in an easier-to-read format. Page 36.

Pension plan running out of cash

LTV creditors may seek concessions

By Joel Chernoff

WASHINGTON — The funding of the dwindling Jones & Laughlin hourly pension plan is likely to become one of the next major sticking points in the lengthy bankruptcy proceedings of The LTV Corp.

Sometime this summer, the plan is expected to run out of money. That fact might be used as a bargaining chip by creditors in pressuring the United Steelworkers of America and the Pension Benefit Guaranty Corp. to grant concessions.

While Dallas-based LTV filed its proposed reorganization plan May 1, President and Chief Executive Officer David H. Hoag said the document is expected to be a structure for discussions, and "undoubtedly will be modified prior to approval."

That process may take months. In the meantime, the J&L hourly plan, one of three LTV Steel plans restored to the company by the PBGC after being terminated in January 1987, is quickly running out of cash. Possibly as soon as last Friday, LTV was expected to ask permission from U.S. Bankruptcy Court Judge Burton Lifland to resume funding the plan from LTV corporate assets. Then, if the plan runs out of cash, the PBGC would have to reterminate it and absorb the unfunded liabilities. Last July, LTV officials estimated the J&L shortfall at $1.6 billion, more than half of the company's $3.1 billion in pension liabilities.

That gives LTV creditors, many of whom have expressed unhappiness with LTV's proposed reorganization, additional leverage in trying to extract concessions from the PBGC and the Steelworkers.

LTV has appealed a district court ruling that restored the J&L plan to the company, but that litigation would be dropped if an agreement were reached.

The creditors also have a compelling argument with the Steelworkers. If the PBGC were forced to terminate the J&L plan, retirees would see their benefits slashed. That would place the union in the awkward position of representing some workers who would receive full benefits under another LTV Steel plan, while others would get diminished benefits under the terminated plan.

United Steelworkers officials were unavailable for comment.

Insiders do not expect the plan actually to be terminated, because

See **LTV** *on page 50*

Real estate values fall by $5.4 billion

Firms hit in fourth quarter of 1990

By Steve Hemmerick

Institutional real estate lost about $5.4 billion in appraised value in 1990, *Pensions & Investments* estimates.

Some consultants predict losses will continue this year.

The paper losses also have hurt real estate investment managers who base their fees on the appraised value of assets under management. Managers could, in aggregate, lose more than $50 million in fees this year, based on an average fee of 100 basis points or 1%.

P&I arrived at its $5.4 billion estimated loss by calculating data from the Russell-NCREIF Property Index, the most widely used index to measure performance of tax-exempt institutional real estate, and *P&I*'s statistics on assets of the largest real estate money managers.

The Russell-NCREIF index reported property values dropped 5.2% in 1990. And last fall, 105 of the largest real estate investment managers reported $104.3 billion in tax-exempt equity real estate investments. A 5.2% decline in value would result, in dollar terms, in the more than $5 billion loss in appraised property values.

Losses in property values were broadly based last year. Even some of the managers with stellar long-term returns — including TCW Realty Advisors, Los Angeles; Equitable Real Estate Investment Management Inc., New York; JMB Institutional Realty Corp. Chicago; and Heitman Advisory Corp., Chicago — reported losses in their commingled real estate funds.

According to a real estate industry source, who asked not to be identified, these firms' commingled funds, which generally are regarded as being the most popular among pension investors, suffered losses last year, particularly in the fourth quarter.

Executives at TCW and Equitable Real Estate confirmed the performance figures; Heitman declined to confirm the data and JMB officials couldn't be reached for comment.

For example, in 1990 TCW took a 9.3% writedown for Fund I, 7.9% for Fund II, 6.7% for Fund III, 6.5% for Fund IV and 5.4% for Fund V.

During the three-year period ended Dec. 31, Fund I returned 2.3%; Fund II, 4.4%; Fund III, 8.3%; and Fund IV, 6.8%. Fund V is too new for a three-year record.

Equitable's Prime Property Fund took a 3.7% writedown in the fourth quarter of 1990, its fifth consecutive quarterly writedown. Still, the fund returned a compound annualized 6.1% before fees were deducted for the three years ended Dec. 31.

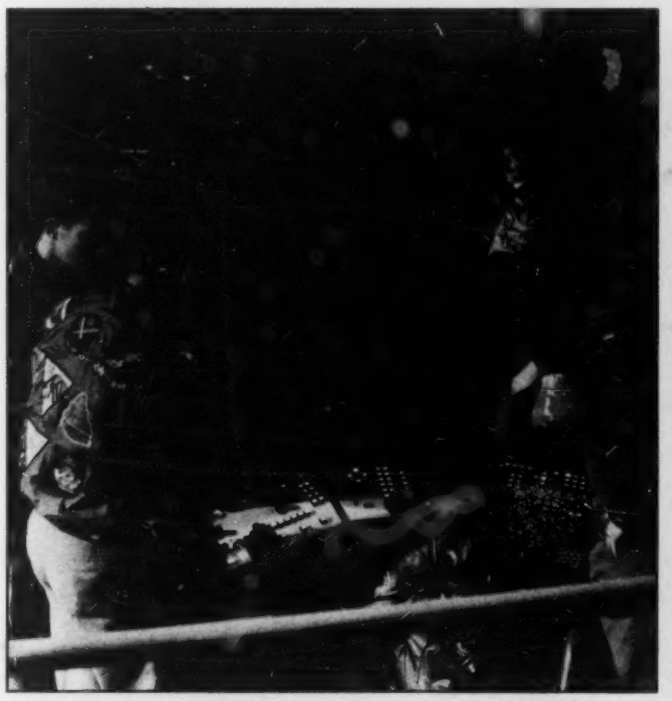
Heitman's Fund II took a writedown of 6.8% in the fourth quarter and Heitman Fund IV, 4.5%. Fund II returned 5.1%, after fees, for the three-year period; Fund IV is too new for a three-year record.

JMB's Group Trust IV took a fourth quarter writedown of 4.2%, or a $28.7 million paper loss. For the three years ended Dec. 31, the fund returned about 8.8%.

Equitable and JMB executives have blamed the writedowns on a generally soft real estate market, lack of liquidity in the economy, higher real estate yields and lower real estate prices.

Equitable executives said Prime Property Fund's losses primarily were in office properties, which they said fell 12.1% in value in

See **Values** *on page 50*



Cubic Corp., which manufactures this combat training system, has invested $25 million in a dividend capture strategy.

Dividend capture makes a comeback

By Marlene Givant Star

Dividend capture and related strategies are regaining popularity among corporations and pension funds.

The short-term investment strategy lost favor in the late 1980s as returns suffered, causing a painful consolidation in the industry. In its heyday, about $3 billion was in dividend capture; now, there is less than $1 billion, estimated Robert Gordon, president of Twenty-First Securities Corp., New York, which manages $1.5 billion in 27 corporate short-term investment strategies, about 20% of it in dividend capture.

In addition to hiring specialist managers, many corporations buy adjustable-rate preferred stock to capture dividends, safeguard principal and take advantage of the intercorporate dividend exclusion.

Companies that typically benefit most from dividend capture are those with investible cash that pay the maximum tax rate of 34%.

American companies must hold a stock for 46 days to qualify for

See **Strategies** *on page 48*

NEWS DIGEST

Texas Sen. Lloyd Bentsen is the Democratic sponsor of a bill aimed at expanding individual retirement accounts. But financing the estimated $28.5 billion cost of the proposal will be the key to passage. Page 26.

Gov. Mario Cuomo proposes a plan to allow New York's public pension funds to invest up to 25% of assets for economic development. Page 6.

Equity managers pump cash into the stock market just in time to catch the big first-quarter jump. Page 33.

SPECIAL REPORT: MUTUAL FUNDS

After a decade of tremendous growth, the mutual fund industry is finding more and more players ready to split up its market share. Page 16.

FINANCING

Fruehauf Trailer Corp. makes a rare appearance for a corporate pension fund on a creditors committee involved in the reorganization of a bankrupt realty and financial services firm. Page 3.

INTERNATIONAL

American depository receipts are drawing increased interest from a small but loyal cadre of institutional investors. Page 4.

REAL ESTATE

Institutional real estate lost about $5.4 billion in appraised value in 1990, and some consultants predict losses will continue this year. Page 1.

NCNB National Bank officials want to convert a $539 million common trust to a limited partnership fund, hoping to avoid a forced, protracted sale of assets. Page 2.

The Waterbury (Conn.) Retirement System files suit to recoup more than $500,000 the system lent to a real estate limited partnership. Page 32.

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International questionnaires overdue

The deadline for returning questionnaires for *Pensions & Investments'* annual survey of the largest international managers was May 12. The special report will be published June 24. If you did not receive a questionnaire this year and believe you would qualify for inclusion in the report, contact Christine Philip, directory coordinator, at (312) 649-5217.

NCNB acts on realty fund

Proposed partnership would ease withdrawal problem

By Steve Hemmerick

CHARLOTTE, N.C. — NCNB National Bank officials want to convert the $539 million common trust NCNB Real Estate Fund to a limited partnership fund, hoping to avoid a forced, protracted sale of assets.

Such a move would allow limited partners to pursue a secondary market for ownership interests in the fund, and would let NCNB continue to manage the investments.

At the end of January 1991, following discussions with its larger investors, trustees voted to liquidate the fund. But the trustees hope the conversion to a limited partnership will provide the cash needed while selling little of the fund's actual assets.

Although many investors, such as the $826 million Duke Power Co. pension fund, Charlotte, N.C., have expressed confidence in NCNB's management leadership, others want to cash out because they are reducing their real estate commitment in general or because they are terminating their tax-exempt plans, according to Floyd T. Boyce, director of NCNB Real Estate Investment Services.

In 1990 alone, NCNB received withdrawal requests of $13 million June 30, $22 million Sept. 30 and $8 million Dec. 31.

Trustees "froze" the fund in September, thereby suspending further withdrawals pending an investor poll. In late November, that poll had revealed investors wanted to withdraw a total of $124 million — or about 23% of the fund, partly a result of the bad publicity concerning real estate, said Mr. Boyce. At that time, however, the fund had only $35 million in cash to meet withdrawal requests.

Ordinarily, the fund has only one year to meet withdrawal requests. Cash also was needed for further development of properties, and there was little money coming into the fund, said Mr. Boyce.

Under a limited partnership structure, investors who want to cash out can sell their interests to other fund participants or new investors, tax-exempt or taxable, without having NCNB sell assets on the open market.

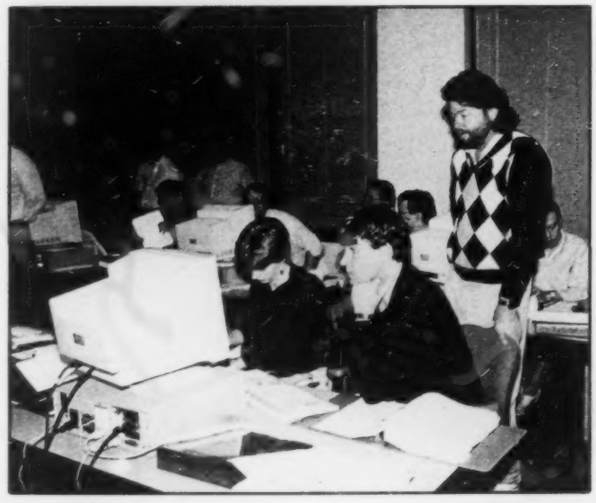
The NCNB plan also calls for investors to approve of transferring at least two-thirds of the assets into the new partnership, said Mr. Boyce. Although NCNB would continue as manager, the partnership would have a new general partner, as yet not chosen.

Before NCNB trustees can begin the process, they must get the approval of an independent fiduciary, which also has not yet been chosen.

Also, they must hope there are enough buyers and sellers on both sides of the planned transaction

See **NCNB** *on page 49*

Plan administration is on-line



Benefit administrators use systems like WyPen to cut costs and increase responsiveness.

By Fred Williams

Computer technology is promising to revolutionize the administration of employee benefit plans.

Executives at Primerica Corp., the State Universities Retirement System of Illinois, Halliburton Co., Bell Atlantic Corp., General Electric Corp., Xerox Corp., Ford Motor Co. and General Motors Corp. are among the first to embrace some of the changes.

Advances in image processing and the development of sophisticated pension administration software and interactive data techniques — coupled with a lower price tag for the technology — promise to make the staid pension administration function the focal point of retirement planning. In addition, these developments could affect plan design changes suited to a more sophisticated and mobile work force.

But primarily, advances in technology will make benefits ad-

See **Technology** *on page 45*

401(k)s star in expansion effort

By Hillary Durgin

WASHINGTON — Tax-exempt institutions and state and local governments could establish 401(k) defined contribution plans for their 12 million employees under the Labor Department's new plan to expand pension coverage.

But the small businesses employing 26 million workers who have no pension are likely to find the cornerstone of Labor Secretary Lynn Martin's proposal too costly for them to offer to employees, pension consultants said.

The provision of the administration's proposal likely to affect large employers is one that would make it easier for workers who switch jobs to transfer retirement savings into individual retirement accounts or to the new employer's plan, providing the company is willing to accept the transfer. But this provision is not expected to have much of an impact on employee savings.

The five-pronged program, Pension Opportunities for Workers' Expanded Retirement, is intended to expand pension coverage to 42 million workers who lack retirement coverage because of the complexity and cost of pension plan administration.

The provision of the Labor Department's proposal allowing tax-exempt institutions and state and local governments to have 401(k) plans would benefit 12 million workers, 3.1 million of whom have no pension, according to Labor Department estimates.

"The key impact of this proposal is that the not-for-profit sector is going to be absolutely delighted to establish 401(k) plans," said Henry Saveth, princi-

See **Coverage** *on page 46*

Labor Secretary Lynn Martin is trying to expand pension coverage.

Where they stand on the pay scale

Firm	Top financial officer	Amount
Walt Disney	Gary L. Wilson	$2,134,280
	(Salary, $134,280; bonus, $2,000,000)	
ITT	M. Cabell Woodward Jr.	$1,201,869
General Mills	F.C. Blodgett	$1,069,402
USX	W.B. Thomas	$1,032,000 **
BankAmerica	Frank N. Newman	$975,000
Southwestern Bell	R.G. Pope	$946,400
	(Salary, $520,600; bonus, $425,800)	
Anheuser-Busch	Jerry E. Ritter	$903,062
	(Salary, $451,062; bonus, $452,000)	
Lockheed	V.N. Marafino	$899,635
Textron	Dennis G. Little	$858,717
Litton Industries	Joseph T. Casey	$852,670
Sara Lee	Michael E. Murphy	$798,460
Honeywell	Christopher J. Steffen	$794,445
Reynolds Metals	R. Bern Crowl	$775,000
	(Salary, $375,000; bonus, $400,000)	
CIGNA	James G. Stewart	$766,000
AMR	Donald J. Carty	$666,667
	(Salary, $366,667; bonus, $300,000)	

Listing continued on page 42

Apple CFO tops list in '90 salary derby

By Marlene Givant Star

Joseph A. Graziano, Apple Computer Inc.'s chief financial officer, earned $2.793 million in 1990, making him the highest paid financial executive among the more than 1,000 public companies sampled by *Pensions & Investments*.

His total 1990 compensation even bested that of the company's chief executive, John Sculley, who earned $2.199 million, although Mr. Sculley's long-term compensation amounted to a mammoth $14.531 million in 1990.

Mr. Graziano's compensation included $600,000 in bonuses and $1.5 million paid under an employment agreement. Close behind was Gary L. Wilson, chief financial officer of Walt Disney Co., with $2.13 million. Mr. Wilson's 1990 compensation included a salary of $134,280, which reflected payment for the portion of fiscal 1990 — Oct. 1 to Dec. 31, 1989 — when he was chief financial officer. A $2 million bonus was paid during fiscal 1990 for services rendered in fiscal '89. Judson Green is Disney's new CFO; he replaced Mr. Wilson, who remains a Disney board member and consultant.

Other runners-up included James Morrison of Atlantic Richfield Co., with $1.238 million; M. Cabell Woodward Jr. of ITT Corp., with $1.202 million; and George G. Vojta of Bankers Trust Co., with $1.2 million.

The few CFOs breaking the $1 million mark span an array of industries. They include F.C. Blodgett of General Mills Inc., with $1.069 million, and Morris Tanenbaum of American Telephone & Telegraph Co., Douglas H. McCorkindale of Gannett Co. Inc. and W. Bruce Thomas of USX Corp., each with $1.03 million.

All of these companies, with the exception of Bankers Trust and AT&T, had top-paid CFOs included in last year's survey. Disney's Mr. Wilson was last year's top earner, at $2.5 million, which included $500,000 in deferred cash compensation.

Mr. Morrison, the new CFO of Atlantic Richfield, replaces Ronald Arnault, now an executive vice president of ARCO. Mr. Arnault earned $1.194 million in 1990, compared with $954,400 in 1989.

Mr. Blodgett's compensation stayed the same during the pe-

See **Salaries** *on page 42*

Double-teaming an old foe

Management, labor work to slay health cost dragons

By Hillary Durgin

Corporate management and labor leaders are forging new alliances to tame Pac-Man-like health care costs, shifting the focus away from the bargaining table.

These new alliances — involving major corporate leaders such as American Airlines, USX, AT&T, BellSouth and General Motors — represent trends that may be mimicked throughout American industry.

Labor and management are working together to implement a wide array of initiatives to bridle costs that are eating up corporate profits by as much as 30% annually and comprising up to 15% on average of workers' total employment costs.

The initiatives range from variations on the joint labor/management committees on health care born in the 1980s to regional experimental cost containment strategies and purchasing alliances.

In some instances, companies and their unions and intraindustry groups are teaming up to flex their political muscle in search of long-term, national health care reform.

These efforts represent a joint realization by corporations and labor unions that issues of cost, quality and access to health care cannot be resolved at the bargaining table. Such issues last year accounted for 80% of all strikes.

"The single issue in the labor management arena in this country which creates the greatest likelihood for disagreement is health care," said Ralph Craviso, vice president-employee relations at American Airlines Inc., Fort Worth, Texas.

Some unions, such as the Transport Workers Union of America and the Communications Workers of America have compromised in negotiations. Others such as the Airline Pilots Association, the United Steelworkers of America and the United Auto Workers have differences of opinion and in some cases have taken a hard line against benefit modifications. Still, a new flexibility is permeating discussions in corporate corridors, negotiating chambers and the halls of Congress.

"The lesson in the mature (joint labor management) committees . . . is that now both sides . . . have come around to the notion that the appropriate venue for bringing health care inflation under control is somewhere other than the bargaining table," said Karen Ignagni, director of the department of employee benefits at the AFL-CIO, Washington.

The AFL-CIO announced a broad resolution for national health care reform in February.

"It's a very telling development that lots of other companies in the auto industry, the steel industry and the communications industry are deciding to work together to seek some sort of joint strategic plan for legislative relief," she said.

Companies and unions have diverse strategies for dealing with health care cost issues. Here's a sampling:

American Airlines

In 1989, American Airlines struck a compromise in its negotiations with its largest union, the Transport Workers, to overhaul the company's health care program for active and retired workers.

"Whereas in the past, the unions had been advocates of an increase in the level of health care benefits, the Transport Workers Union has been partners with us," Mr. Craviso said.

American put in a flexible benefits program for active workers and a pre-funded retiree health program.

The new flexible benefits program shifts a portion of the increased health care costs to the employee. Between 1989 and 1990, American's health care costs rose 14.5% to $2,556 per active worker from $2,233 and 6.6% to $2,337 per retiree from $2,193.

Under the plan, which went into effect in January 1990, an employee has a choice of indemnity plans with different levels of deductibles and out-of-pocket expenses. In the first year, the employees paid no more than they paid the previous year for the same level of benefits. In subsequent years, however, if employees want to continue the same level of coverage, they share the cost of health care cost increases with American based on a formula.

The result has been that management and labor are working together to control costs, and the employees are more involved.

"Having agreed to a formula wherein their members will share in part of the increase in health care costs, it became incumbent on the unions to find ways to reduce health care cost increases," Mr. Craviso said.

While American and the Transport Workers struck a compromise on negotiations, talks with the pilots' union have been less successful. To resolve the negotiations over health care and other issues, the parties agreed to an

See **Health** *on page 50*

American Airlines and the Transport Workers Union are working together to curb rising health care costs.

Pension fund on creditor panel

By Marlene Givant Star

LITTLE ROCK, Ark. — Fruehauf Trailer Corp., in a rare appearance for a corporate pension fund, is among the official members of a creditors committee involved in the reorganization of Fairfield Communities Inc.

Fairfield, one of the 10 largest companies to file for bankruptcy in 1990, has filed a plan of reorganization calling for the formation of a new sales company with less than 10% of the assets of the former real estate development and financial services company.

Detroit-based Fruehauf is on the committee of exchange noteholders, along with such investors as Washington Square Capital, Minneapolis; CNA Insurance Co., Chicago; and Kemper Financial Services, Chicago.

All of Fruehauf's workout investments are managed in-house, whereas most pension funds investing in distressed companies do so through specialized limited partnership funds or outside managers.

Fairfield's reorganization plan, filed May 8, is a work-in-process, meaning it will be used as a basis for further discussions — or court battles — among the company's stockholders and creditor groups. Those groups include trade creditors, senior subordinated secured noteholders (also known as exchange noteholders), unsecured bondholders and secured lenders led by Bank of Boston.

The company filed for protection under Chapter 11 of the Bankruptcy Code in October. It has 23 resort and home developments on approximately 70,000 acres in 10 Sun Belt states. It also sells timeshare interests in fully furnished homes. It owns First Federal Savings and Loan Association of Charlotte, N.C., which mainly originates single-family residential loans in the Charlotte area, according to The Bankruptcy DataSource, a publication of New Generation Investments Inc., Boston.

First Federal and certain real estate subsidiaries were not part of the bankruptcy filing.

Fairfield's plan calls for it to split into two companies: Property Co., which will — over time — liquidate more than 90% of the assets of Fairfield for the benefit of creditors, and Sales Co., which is expected to have sales volume of less than half that of

See **Workout** *on page 49*

Real estate investment criteria by property type – 1st quarter 1991*

Property type	Industrial	Retail: Regional centers	Retail: Community/ neighborhood/ power centers	Office: CBD	Office: Suburban	Apartment
Range**	11-13	11-13	11-12.5	11.5-13	11-13	10.5-13
Going-in cap rate (%)	9.1	7.4	9.0	8.6	9.4	8.6

*This survey was conducted in March 1991 and reflects desired returns for first quarter 1991 investments.
**Ranges and other data reflect the central tendencies of respondents; high and low responses have generally been eliminated.

REAL ESTATE

Investors' higher yield expectations aren't being met

■ Institutional real estate's buyers and sellers are out of sync, Real Estate Research Corp.'s first-quarter investment survey shows.

Investors say they have cash to invest, although their targeted yields continue to rise in light of a reassessment of the risk inherent in realty investing. But a lack of deals "spotlights the disparity between buyer and seller investment strategies," Chicago-based RERC says.

Respondents had allocated between $11 billion and $12 billion for investment in 1991. Almost 75% of the respondents, however, said last year's allocations were below targeted amounts.

Among property types, 45% of the survey respondents expressed a preference for retail, up from 33% in the fourth quarter of 1990. Some investors still were seeking regional malls, but many said they see opportunities in smaller centers with good economics and in centers that could be rehabilitated or expanded.

Industrial properties were preferred by 32% of the respondents, followed by apartments with 23%. None of the respondents picked offices as the property type of first choice; investors are waiting for the current oversupply to be absorbed.

As in 1990, investors generally were pessimistic in their outlook.

Income streams were expected to stay flat for the next two to three years, with a slight improvement after that. Meanwhile, expenses were expected to increase 4% to 5% annually and the five-year projection for inflation was about 5% annually.

INVESTING

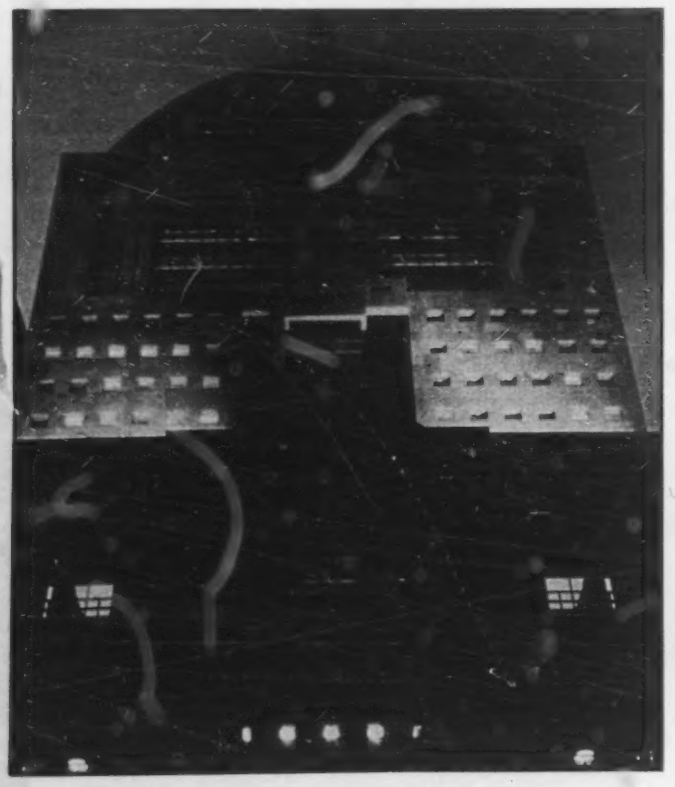
This analysis nothing to sneeze at

■ If you're pleased you escaped the flu this winter, consider the impact that might have had on your investments.

According to Sanford C. Bernstein & Co. Inc., New York, a weak flu season resulted in a reversal of the trend toward hospital management companies showing modestly improving acute care occupancies.

In its update on the health care industry, Bernstein noted hospital admissions fell 2% during the first quarter at such companies as Humana Inc. Humana's quarterly earnings per share should rise 11%, compared with 20% to 25% for Medical Care International, whose out-patient surgery centers are gaining market share.

Among health care suppliers, Johnson & Johnson is Bernstein's favorite major market capitalization stock because of its improving pharmaceutical mix, although it is expected to suffer a slightly weak first quarter.



Humana Inc.'s quarterly earnings will reflect a weak flu season, according to Sanford C. Bernstein.

WASHINGTON

Third time may be a charm for PBGC officials

■ The Pension Benefit Guaranty Corp. is eating its words.

For the third time in eight years, the federal agency has reversed course as to whether employers quitting a multiemployer pension plan can be liable for withdrawal liability, even if the plan is fully funded.

Now, in a March 22 notice in the Federal Register, the PBGC says that employers can be on the hook.

"If it weren't such an important issue for multiemployer plans, the PBGC's flipflopping would be humorous," said Kyle Brown, a Wyatt Co. benefits attorney in the firm's Washington office.

In 1983, the agency said a withdrawing employer can incur withdrawal liability, even when the plan has no unfunded vested benefits at the end of its preceding plan year. That's because the 1974 Employee Retirement Income Security Act requires that an employer's withdrawal liability be calculated by adding up a series of charges and credits, which can exceed zero even when the plan as a whole is fully funded.

In February 1986, a federal appeals court backed up the PBGC. On Dec. 31, 1986, the PBGC announced it had "erred" in stating that withdrawal liability could be assessed in such situations, saying that the pension law was "ambiguous" on the issue.

Another federal appeals court later agreed with this new position.

But last year, a third appeals court rejected the agency's stance, finding no ambiguity in the statute. This February, the U.S. Supreme Court refused to review the case, known as Wise v. Ruffin.

So after a yet another review, issue, the PBGC is convinced it erred again.

INTERNATIONAL

Managers come close, but no cigar

■ The performance of active international and global equity portfolios improved during the first quarter of 1991.

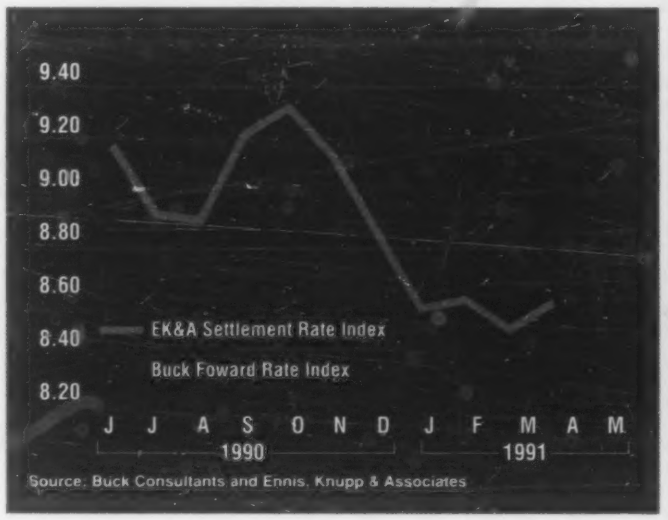
According to The World Markets Co., median returns for WM's universes were slightly below market indexes in the first quarter, but less than half of the indexes' performance for the year ended March 31.

The median non-U.S. equity portfolio in WM's universe returned 7.3%, while the Morgan Stanley Capital International Europe Australia Far East Index returned 7.6%. The median global portfolio returned 9.7%, compared with 10% for the MSCI World Index.

For the 12 months ended March 31, the median non-U.S. portfolio returned 1.2%, while the EAFE had 3.2%. The median global return was 3.3%, compared with 7.2% for the World Index.

For the five years ended March 31, the median non-U.S. annualized return was 14.2%, matching the EAFE, while the median global portfolio returned an annualized 15.5%, beating the 13% posted by the World Index.

The WM universe's first-quarter results include 101 non-U.S. portfolios and 18 global portfolios.



PEOPLE

Jacobs offers special opportunity

■ Irwin Jacobs is raising money again — for a very special investment. While it's a long-term investment, the payoff begins immediately.

The target for Mr. Jacobs' fundraising efforts is $22 million, of which between $16 million and $17 million already has been committed, so the chance to participate is slipping away.

I. Jacobs

The Minneapolis-based investor, chairman of Minstar Inc., Jacobs Investors Corp. and Jacobs Management Corp., is raising the money to finance the Special Olympics, which will be held in Minneapolis and St. Paul beginning July 20.

To win the Special Olympics for the Twin Cities, Mr. Jacobs had to agree to underwrite them for $8 million, and to become chairman of the organizing committee.

The Special Olympics is the summit of athletic endeavor for handicapped athletes. Mr. Jacobs became involved through the participation of his daughter, Sheila, in the Special Olympics held four years ago.

"I cried from the time she got on to the track to the time she finished," Mr. Jacobs said. "That night my wife and I stayed up and talked all night about the experience. I knew I had to get involved."

Mr. Jacobs did not realize the scope of the task he was undertaking. This year 6,200 athletes from 92 countries — including, for the first time, the Soviet Union — will compete. They will travel on 1,000 aircraft and be assisted by 40,000 volunteers.

Those wishing to join such companies as Coca-Cola, Eastman Kodak and IBM in this great investment opportunity can contact Mr. Jacobs.

The 1991 Special Olympics will draw 6,200 athletes from 92 countries.

The scramble's on for mutual fund business

By Curtis Vosti

The mutual fund industry faces a period of intense competition in the 1990s following a decade of of extraordinary growth.

Between 1980 and 1991, the number of mutual funds grew to more than 1,000 from about 250. In assets under management, the funds now control more than $1 trillion, up from just $100 billion at the beginning of 1980.

But the 20% annual growth in the 1980s has resulted in increased competition in the 1990s, just when the rate of asset growth is expected to slow to 10% to 15% per annum.

The competition is coming from banks, investment management firms that have not emphasized mutual funds in the past, brokerage firms offering "wrap fee" programs, and large corporations offering in-house mutual fund manager of managers-style investment management to their employees, pension beneficiaries and even to outside clients.

How well armed the mutual fund industry is to defend its turf remains to be seen. Thoughtful people in the industry, however, are not taking the challenge lightly.

"The mutual fund industry is going to be open game for any financial service company in the 1990s," said John Bogle, chairman of the board of the Vanguard Group of Cos., Valley Forge, Pa.

"The easy wins are behind us for our industry," said Charles Salisbury, managing director of T. Rowe Price, Baltimore. "Now we'll start to see who the real winners are going to be."

The challengers also face some daunting hurdles.

"The business isn't just investment management anymore," said Bob Reynolds, president of Fidelity Institutional Services Inc., Boston. "It is providing record-keeping and other services."

"The shape of and access to the distribution system are the make-or-break issues for the '90s," said a report by the Investment Company Institute, a Washington-based mutual fund trade group.

Distribution patterns will shift a great deal in the coming decade, said A. Michael Lipper, president of Lipper Analytic Services Inc., New York. Banks, insurance companies and brokerage firms all will compete with traditional mutual fund companies, he said.

The sincerest form of flattery

"The boundary lines will be blurred," he said. "In the future, banks and insurance companies will improve their own products."

In effect, the success of mutual funds in the '80s has caused competitors to emulate them.

In addition, in the coming decade, traditional mutual fund companies like Fidelity, Vanguard and T. Rowe Price will be challenged not only by a host of new players, but also by pressures on costs, supply and marketing.

Mutual funds, which have faced and conquered adversity in the past, will not surrender easily before the challenges.

In the 1960s, mutual funds enjoyed a brief surge in popularity with the "Nifty 50" stock funds. But the go-go years proved short-lived, and investors soon found the value of their holdings cut in half as the markets plunged in the 1970s.

In the early 1970s, redemptions of mutual fund shares outpaced sales, and the industry's future looked dim.

A rebound occurred, thanks to the development of money market funds, which combined the pooled fund attractions of the funds with the high interest rates of the period.

In effect, the industry used innovation to make itself competitive and extend the life of its product. In the process, it put itself into competition with banks and took part of the banks' traditional source of funds — passbook savers.

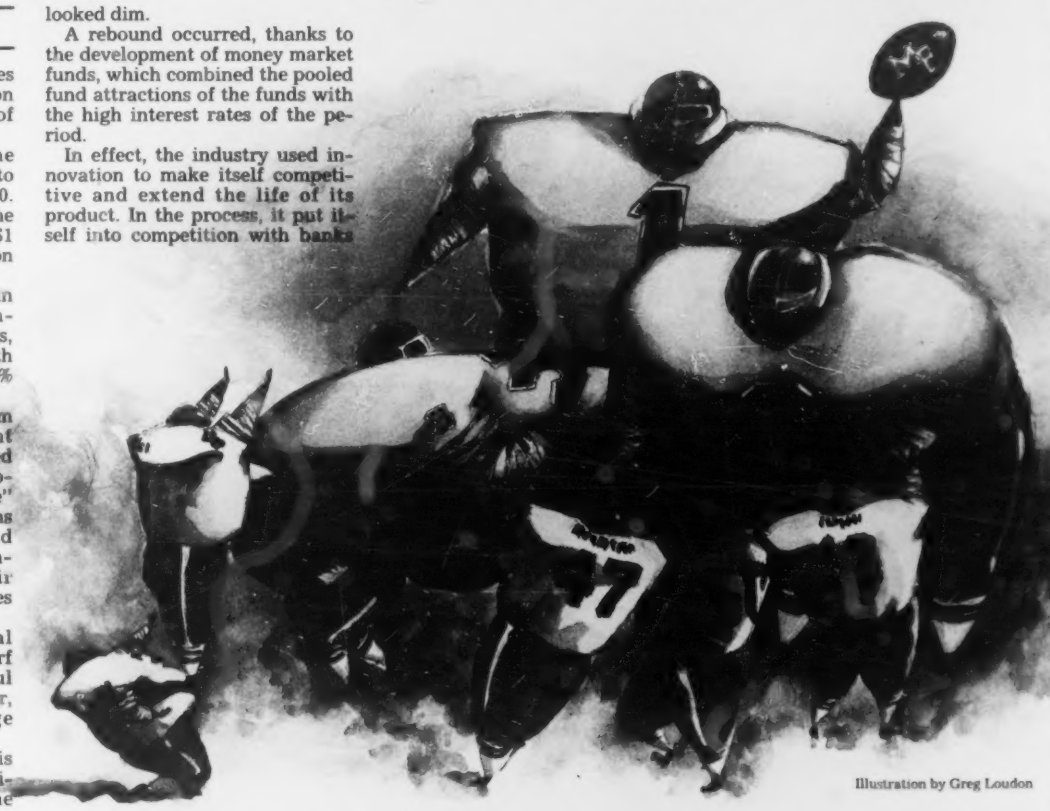


Illustration by Greg Loudon

"It was hard to go to a party without people talking about how their mutual fund money markets were doing," recalled Robert Rudell, vice president for institutional marketing for IDS Financial Services Inc., Minneapolis. "It was hot stuff, and brought in a lot of customers."

But the drop in rates in the early 1980s caused the industry to reassess itself. It broadened its horizons with the introduction of bond funds and high-yield vehicles, but again, after a spell, those found themselves out of favor.

The real growth of the 1980s was sparked by the short-lived tax advantages for individual retirement accounts and the spurt of assets going into 401(k) salary reduction plans after 1982.

Now, as the industry moves into the 1990s, the ability to recreate itself through innovative product offerings will take a back seat to other abilities — those of participant education, administration and distribution.

And although the market will be growing more slowly than in the heady 1980s, it still will be a market worth fighting for.

Household discretionary income is projected to rise to $16.2 trillion in 2000, up from $10.3 trillion in 1995 and $6.7 trillion in 1990. Mutual funds are expected to get 17.6% of that discretionary income in 2000, up from 15.5% in 1995 and 14.5% in 1990.

Competitive advantages

The major mutual fund companies find themselves in a good position to fight the challengers. The strengths that allowed Fidelity, Vanguard and T. Rowe Price to dominate during the growth decade — their "brand name" products readily identifiable to all potential customers, their marketing skills and their customer-pleasing administrative services — will stand them in good stead in the slower growth of the 1990s.

But the new competitors have learned what made the Big Three successful; now they're attempting to emulate them. And each type of competitor has some advantages of its own.

President Bush's banking reform proposal has urged liberalization of the banking industry's role in marketing, distributing and managing mutual funds.

Banks have large customer bases, and those customers are in contact with the banks almost on a daily basis. The major banks also have well-developed marketing departments and powerful computer networks that could allow them to provide the necessary administrative services.

"Everybody's looking for the [illegible] system to play a larger [illegible]," said Frank Sebestyen, senior vice president for State Street Bank & Trust Co., Boston.

Brokerage firms offering "wrap fee" accounts also pose a threat. That type of account appears to offer the sophisticated customer more personal attention than he or she can get from mutual funds.

For the wrap fee, the customer gets the advice and hand holding of a broker-consultant and the management expertise of one or more top investment management firms. And the brokerage firms have large customer bases, large numbers of registered representatives telephoning and knocking on doors to sell the product, and large computer systems on which to mount improved administrative packages.

"The challenge for the fund industry is to make sure the mutual funds are inside most of the wrappers," the ICI report said, referring to the opportunity for the industry to provide its services to brokerages.

In addition, large corporations are offering their own "private label" mutual fund products to their employees and others.

Concerned about their employees' retirement savings, several large plan sponsors — including

See **Mutual funds** *on page 22*

This announcement appears as a matter of record only.

Bear Stearns and **Capital Associates**

are pleased to announce the closing of

Bear Stearns Realty Partners Apartment Fund I L.P.

$160,000,000
in equity commitments

A Private Limited Partnership organized to invest in existing multi-family properties on behalf of pension funds.

Bear Stearns Realty Partners Corporation

Capital Associates Realty Partners Corporation

May 1991

Mutual funds

Continued from page 16

Bell Atlantic Corp., IBM Corp., Owens-Illinois Inc., Bechtel Power Corp. State Farm Insurance Cos., General Electric Co., Caterpillar Inc. and American Airlines Inc. — have created their own mutual funds.

Putting their expertise to use

"The finest institutional investors in the country are the larger pension funds," said Ron Boller, president of Harbor Capital Advisors, an investment firm spun out of Owens-Illinois in 1983.

"It only makes sense for a few plan sponsors that have the resources," Mr. Boller said. "The quality of our investment expertise is not readily available to other people."

Companies usually create a mutual fund program because they think employees need help with investment planning, but there are other reasons as well.

Illustration by Greg Loudon

"Some very large companies have decided to go with mutual fund vehicles because they are a lot more flexible, easier to transfer assets and are available for outside investors," said State Street's Mr. Sebestyen.

The mutual funds also can provide a source of income and cheap financing to companies.

Bechtel set up its mutual funds in response to employees who wanted to invest in a way familiar to them, according to Lou Indindoli, vice president of Fremont Investment Advisors Inc., the investment advisory group set up by Bechtel. The concept works for Bechtel because the employees-turned-investors are comfortable having assets invested in mutual funds, with objectives familiar to them, and handled by an in-house staff familiar to them.

The business also counts on retiring employees rolling over their retirement benefits into IRAs invested in mutual funds. It's an important source of future mutual fund asset growth and income for the firm, Mr. Indindoli said.

Owens-Illinois' Harbor began with one mutual fund and now has six, all run by different managers, including itself. "We have better control of our product this way," Mr. Boller said.

It's a trend he expects will spread among other large pension funds as they look at the cost and performance factors of traditional mutual fund companies.

"We've been approached by other large companies about doing that. I was surprised at how many calls there were," Mr. Boller said. "There is a reason we do these things: It's called quality control. It makes the people feel comfortable that they know what's going on."

The one area where little new competition is expected is the mutual fund industry itself. Few start-up niche funds are in the cards.

Barriers to entry

The ICI report noted that with all the product innovation of the 1980s, it will be hard for new niche players to emerge. But William G. Waller, senior vice president of the Strong Funds, Milwaukee, part of Strong/Corneliuson Capital Management Inc., said the industry needs the new blood.

"If there ever was an industry crying out for new people, it is the mutual fund industry," he said. "However, it's tough to build a name."

Jon Fossell, chairman of Oppenheimer Management Corp., New York, said economies of scale provide a big barrier to new entrants. "Unless you have a couple of billion (dollars) under management, you don't break even."

But Mr. Lipper cautions against ruling out the entrepreneurial spirit that nurtured the mutual fund industry through the growing years.

"It's a very creative industry," he said. "Don't think of niche in terms of portfolios. The mutual fund industry is fundamentally a marketing business. Out of that will come some talent that will make it."

There are several ways the mutual industry can counter the competition it will receive from banks, brokers and corporations.

First, it can (and already does to some extent) sell wholesale its products to banks and even brokerage houses for them to retail.

Fidelity's Mr. Reynolds said mutual fund companies like Fidelity can work with banks, providing help in a number of service areas that have stymied some of the early banking efforts in the field.

While some major banks probably will start their own mutual funds or buy existing ones once the Glass-Steagall Act is abolished, many smaller banks undoubtedly will find retailing existing funds attractive compared with the costs of starting or buying their own families.

Second, mutual funds can build on what seems to be a technological advantage on the administrative side to stay ahead of the competition.

According to Michael Hines, vice president of marketing development for Fidelity, in the '90s the emphasis will switch to service from products.

"The product was the story of the 1980s," he said. "Much of what you are going to see out there (in terms of product) five years from now is already out there."

As the emphasis switches to service, Mr. Hines said, the mutual funds have "hidden technologies" that help to organize what can become a complicated system of investment, record keeping, education and information.

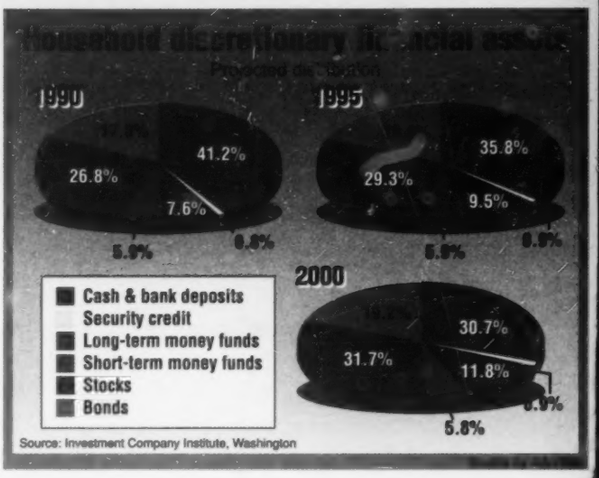
"It can become fairly complicated very easily," he said.

Opportunities are still there

And traditionally, a technology and market share leader reduces prices to protect a franchise. The mutual fund industry could make it expensive for the competition by doing so.

While the market is growing more slowly, and competition is intensifying, there still are great opportunities for the top mutual fund organizations.

The Investment Company Institute said individuals investing through corporate retirement plans — the "insti-vidual market" — are the most promising source of new assets for the mutual fund industry.



Source: Investment Company Institute, Washington

Through the popular participant-directed retirement vehicles, mutual funds will be able to get their foot in the door for personal savings and retirement rollovers.

"Mutual funds have become an important lynchpin of personal financial planning: capital accumulation, retirement planning, medical care, saving for tuition, etc.," IDS' Mr. Rudell said.

"Increasingly, funds will not be sold on their features nor intended customer but rather on the goals they help to fulfill," the ICI's report concluded.

Changing demographics also are expected to play a role in the continued popularity of mutual fund investing and the changing nature of the business.

Two wage-earner families are becoming the norm, and Fidelity's Mr. Hines said although there was a decline in the savings rate among individuals between 1980 and 1991, the pool of new savings investment continues to be large.

"Even with a recession on, there are so many dual wage-earning families, there are tremendous amounts of savings," he said.

While not everyone agrees savings rates will climb in the coming decade, Mr. Hines said, either way it doesn't matter.

In January 1980, he said, with a personal savings rate of 6.48%, new savings grew by $119 billion; in January 1991, with a savings rate of just 4.68%, new savings still grew by $187.4 billion. In January 1989, new savings stood at $157 billion.

"There is a tendency toward higher savings," he said. "U.S. investors are trying to get their financial houses in order."

Mutual funds are likely to benefit from changing savings patterns and from preliminary signs of an increase in the money supply, Mr. Lipper said.

"There will be a societal shift to savings and investments," he said. "If inflation does not rear its ugly head, (an increasing money supply) could last long enough to have a real shot in the arm to investment flows."

Equity funds could benefit

He said that Congress and the president can and are playing a positive role. "The administration and Sen. (Lloyd) Bentsen are pushing IRA-like savings programs," he said, which could provide an outlet for nervous investors. "The whole investment attitude got shook up before this last recession.

"It used to be that the home was the biggest investment (for an individual), and it always used to go up in value. Now, home values don't always go up. It's no longer a safe bet to sell your home for a sufficient enough profit."

This change could lead to greater use of equity mutual funds, he said.

"A bold assumption might be that fixed-income (funds) will drop to 65% from 75%," Mr. Lipper said. "If you add 10% to equity, that's a 40% increase for the decade."

Indeed, the Investment Company Institute believes many forces are at work to bring equity funds back to center stage.

Corporate efforts to "re-equify" after years of debt, customers' realization that they need the higher long-term returns of equities to finance retirement and other expenses and the margin squeeze on managers all will help focus on equity products.

"The successful product will combine equity-like returns with comfort for the risk averse," the ICI report said. "Equity managers with proven (track) records will be at a premium."

Quantitative techniques and indexing also will play increasing roles, as the pressures of cost containment adds to the shortage of equity managers, the ICI report said.

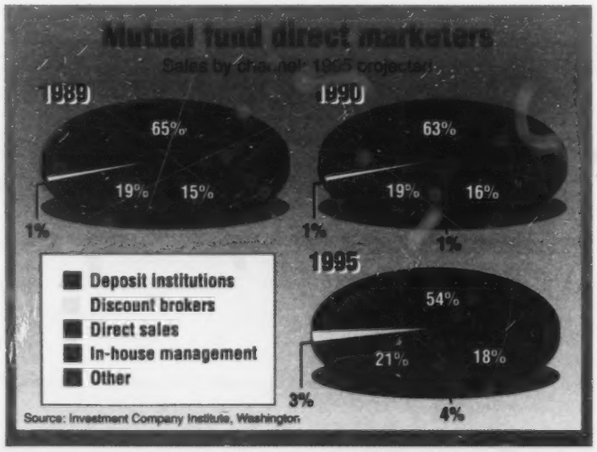
"The pressure to allow these techniques into the individual marketplace through mutual funds is bound to increase, especially if the markets remain volatile," the report said.

Meanwhile, Mary Barneby, president of the benefits division of Dreyfus Group Retirement Plans, New York, said there still will be room for the funds that show stellar returns.

"Good performance is always noticed," she said. "There's still room for good managers."

And good performance will attract investment dollars to the mutual fund industry in the 1990s.

So weep not for the mutual fund industry in the slow-growth '90s. It is well-positioned to meet the emerging competition head-on and to defend its turf. ■



Source: Investment Company Institute, Washington

Money movers is a section that details the appointments of money management firms for tax-exempt funds.

It appears in each issue of *Pensions & Investments*.

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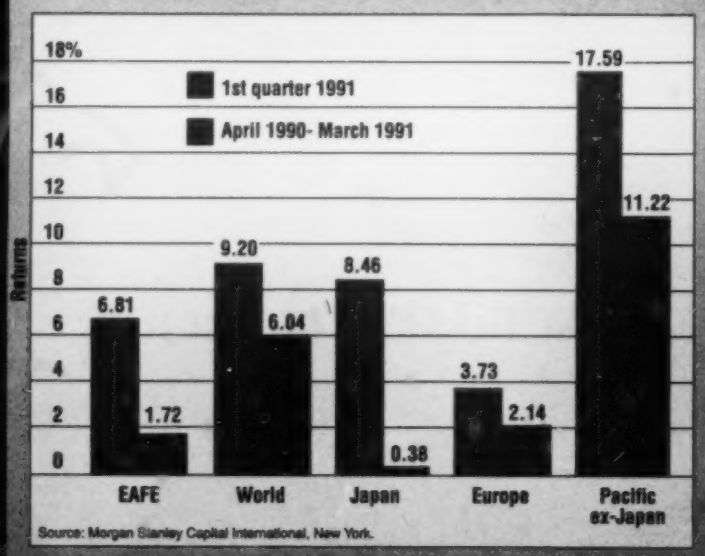
MSCI Worldwide indexes

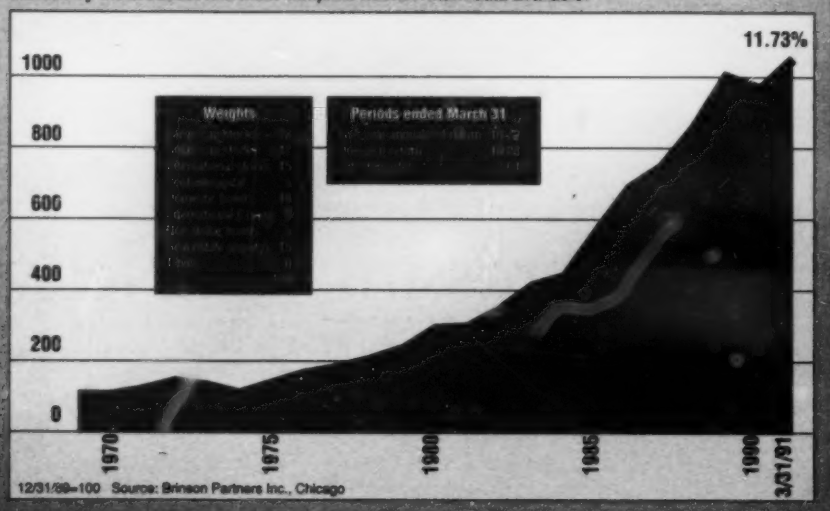
Indexes are in U.S. dollar terms without dividends re-invested



Source: Morgan Stanley Capital International, New York.

Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.



12/31/89=100 Source: Brinson Partners Inc., Chicago

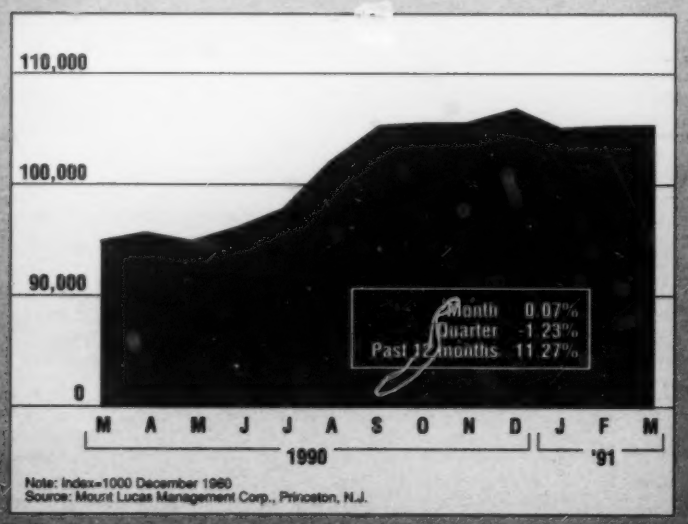
Russell indexes by economic sector

First quarter 1991 returns

	Russell 3000	Russell 2000	Russell 1000
Health care	22.45	42.01	21.19
Consumer staples	18.16	21.62	18.11
Other energy	3.26	7.13	2.90
Producer durables	13.52	26.26	12.41
Financial services	25.92	33.12	25.54
TOTAL	16.23	29.74	15.53

MLM Index

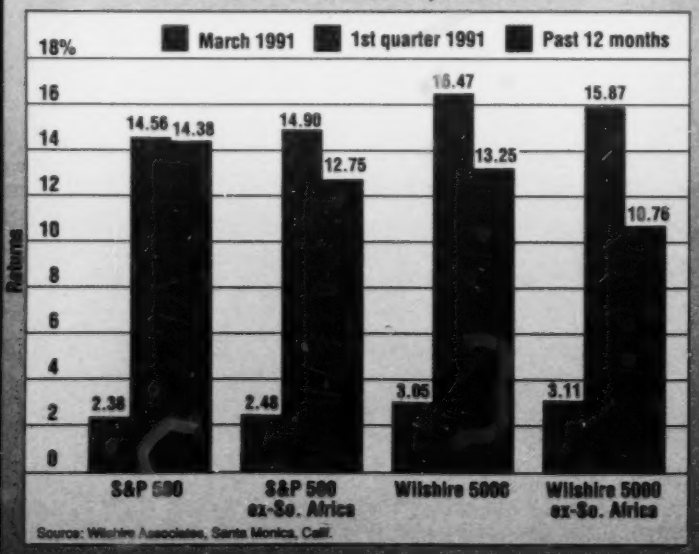
The MLM Index is an unleveraged index used as a benchmark to evaluate commodity futures investments. Periods ended March 31.



Note: Index=1000 December 1980
Source: Mount Lucas Management Corp., Princeton, N.J.

South Africa Free Index

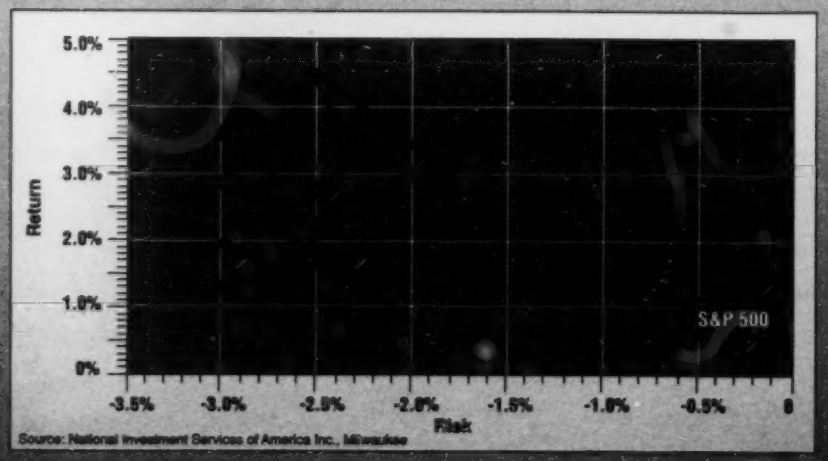
Ex-So. Africa excludes stock of companies with an equity stake in a South Africa business, no replacements.



Source: Wilshire Associates, Santa Monica, Calif.

Efficient Index

The Efficient Index is the stock portfolio chosen from the population of S&P 500 stocks with the lowest return volatility in the 24-month period preceding each quarter, subject to the following constraints: 1. A stock must have a 24-month trading history at the start of the quarter. 2. At the start of each quarter, the weight of a stock must be no less than zero and no more than three times its S&P 500 weight or 5%, whichever is less. 3. At the start of each quarter, no one industry weight can be greater than 20%. 4. Turnover is controlled to approximate 20% annually. Shown in rolling three-year periods.



Source: National Investment Services of America Inc., Milwaukee

GRAPHICS BY CYNTHIA WATSON

Rates take roller coaster ride during quarter

By Fred Williams

Rates for insurance and bank guaranteed products were volatile in the first quarter, bottoming out in February before recovering at the end of the quarter to near year-end 1990 levels.

"GIC/BIC volatility during the first quarter, which mirrored the bond market, resulted primarily from the Federal Reserve's decision to lower the Fed funds rate (half a percentage point) in late January and from the quick and decisive victory by coalition forces in the Persian Gulf, which lessened the fear of a prolonged recession and allowed rates to rise," said Peter Bowles, president and chief investment officer at Fiduciary Capital Management Inc., Woodbury, Conn., a GIC/BIC investment manager.

Rates on some maturities were lower, however. One-year GICs finished the quarter 70 basis points lower than they were at year end, said Bill Gardner, chief operation officer of the Laughlin Group, Portland, Ore., a GIC consulting firm. The rate dropped to 6.4% from 7.1% at the end of the year.

Spreads over comparable maturity Treasury instruments remained tight, around 70 to 90 basis points — about the same as at the end of 1990.

Mr. Gardner said concerns about credit quality of insurance carriers did not affect overall GIC rates during the quarter, although "we have seen a broader introduction of credit-enhanced (guaranteed) products and synthetics by carriers and by banks."

John Knight, president of Lamberson Knight Inc., Short Hills, N.J., said the GIC market was "fairly lackluster" during the first quarter, as were other fixed-income markets.

"People were on the sidelines waiting to see if the economy would rebound with any vigor. And a lot of investors, particularly in pooled funds, were just waiting for the economic news," said Mr. Knight.

He said the flight to higher-quality issuers remained in full force during the first quarter because of client concerns about credit quality in the insurance industry.

But, "we will start seeing people extending maturities (from shorter term GICs and money market instruments to the three- to five-year range) where better rates are to be found at some point. If they don't, they will be pulling down the overall yields in their portfolios," he said.

The following insurance company rate quotations on representative five-year, single-deposit, simple-interest, $1 million GICs were provided by Lamberson Knight and GIC Inc., Beaverton, Ore.:

- John Alden Life Insurance Co., Miami: March 28, 8.65%; Dec. 28, 1990, 8.55%.
- Allstate Life Insurance Cos., Northbrook, Ill.: 8.38%; 8.33%.
- Bankers Life Assurance Co., Des Moines, Iowa: 8.09%; 8.04%.
- Canada Life Assurance Co., Toronto: 8.44%; 8.28%.
- CNA Insurance Co., Chicago: 8.29%; 7.94%.
- Confederation Life Insurance Co., Atlanta: 8.55%; 8.35%.
- Connecticut Mutual Life Insurance Co., Hartford, Conn.: 8.45%; 8.38%.
- Crown Life Insurance Co., Toronto: 8.3%; 7.98%.
- Hartford Life Insurance Co., Hartford: 8.3%; 8.15%.
- John Hancock Mutual Life Insurance Co., Boston: 8.3%; 8.19%.
- Life Insurance Co. of Georgia, Atlanta: 8.25%; 8.05%.
- Life Insurance Co. of Virginia, Richmond: 8.44%; 8.16%.
- Lincoln National Life Insurance Co., Fort Wayne, Ind.: 8.13%; 8.21%.
- Massachusetts Mutual Life Insurance Co., Springfield: 7.96%; 7.88%.
- Mutual Life Insurance Co. of New York, New York: 8.53%; 8.35%.
- New York Life Insurance Co., New York: 8.4%; 8.25%.
- Northwestern National Life Insurance Co., Minneapolis: 8.42%; 8.27%.
- Ohio National Life Insurance Co., Cincinnati: 8.54%; 8.41%.
- Pacific Mutual Life Insurance Co., Newport Beach, Calif.: 7.92%; 7.81%.

William M. Mercer Asset Planning Inc., Deerfield, Ill., surveys insurance companies for rate quotations and provided the following summary of various bullet GICs for March 1991:

- Three-year, $1 million, compound: high, 8.3%; low, 6.92%; average, 7.79%.
- Three-year, $1 million, simple: high, 8.3%; low, 6.93%; average, 7.75%.
- Five-year, $1 million, compound: high, 8.8%; low, 7.55%; average, 8.45%.
- Five-year, $1 million, simple: high, 8.8%; low, 7.53%; average, 8.36%.
- Seven-year, $1 million, compound: high, 9.1%; low, 7.86%; average, 8.67%.
- Seven-year, $1 million, simple: high, 9.15%; low, 7.85%; average, 8.59%.
- Three-year, $5 million, compound: high, 8.3%; low, 7%; average, 7.86%.
- Three-year, $5 million, simple: high, 8.3%; low, 7.26%; average, 7.82%.
- Five-year, $5 million, compound: high, 8.8%; low, 7.84%; average, 8.52%.
- Five-year, $5 million, simple: high, 8.8%; low, 7.81%; average, 8.42%.
- Seven-year, $5 million, compound: high, 9.1%; low, 8.14%; average, 8.75%.
- Seven-year, $5 million, simple: high, 9.15%; low, 8.12%; average, 8.65%.

Mercer also surveys banks for rate quotations on their guaranteed instruments. Rate quotes for one- and three-year bullet BICs for March were:

- One-year, $1 million, compound: high, 7.2%; low, 6.47%; average, 6.76%.
- One-year, $1 million, simple: high, 7.55%; low, 6.47%; average, 6.83%.
- Three-year, $1 million, compound: high, 8.32%; low, 7.57%; average, 7.84%.
- Three-year, $1 million, simple: high, 8.63%; low, 7.56%; average, 7.98%.
- One-year, $5 million, compound: high, 7.22%; low, 6.57%; average, 6.84%.
- One-year, $5 million, simple: high, 7.6%; low, 6.57%; average, 6.88%.
- Three-year, $5 million, compound: high, 8.39%; low, 7.62%; average, 7.92%.
- Three-year, $5 million, simple: high, 8.63%; low, 7.59%; average, 8.02%.

Schmidt Management Co., a GIC market research firm in Tulsa, Okla., has developed a guaranteed product performance measurement index. The Schmidt GIC composite index approximates the return of a continuous, equally weighted investment in one- to 10-year original-maturity GICs. (The index shows returns, not rates.).

Total returns for the quarter and 12 months ended March 28 were 2.3% and 9.5%, respectively. The Standard & Poor's 500 Stock Index returned 14.5% and 14.4%; the Merrill Lynch Government/Corporate Bond Index, 2.5% and 12.3%; and 91-day Treasury bills, 1.5% and 7.3%. ■

P&I spotlights the fastest growing money managers in the July 8 issue.

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Some Plain Talk About Defined Contribution Plans

RESPONSIBILITY

Selecting a provider for your company's 401(k) plan is a complex undertaking with far-reaching and long-lasting consequences. You bear a great responsibility to choose well. So when you select a company, or review your present providers, you will want to focus on the factors that really matter–the fundamental issues.

Employees Your first responsibility is to your company's employees because it's their financial security which is at stake. Since participants make their own investment decisions, you must ensure that all–the experienced and the novice alike–are provided with adequate education about the fundamentals of long-term investing. Employees should also be given convenient and timely access to information and the ability to change their investment line-up easily and quickly when necessary.

Your responsibility doesn't end when employees' initial selections have been made. Adequate information must also be provided as they transition through an employment career and on into retirement. The company you select should always be there for them.

Performance Of course, you want good performance. But in addition, your larger responsibility is to provide a broad, well-defined selection of investment options which provide dependable results over the long term. Your investment options–from conservative to aggressive–should be managed for specific objectives with each following a tightly prescribed and understandable investment strategy.

Partnership You strive for excellence in your own company. You should expect no less a commitment from a partner. Your administrative partner should have a deep line-up of well-trained people who will be ready to serve your needs, not only in the basics of timeliness and accuracy, but in responding to special requests. Your company is continually changing. Your partner should be flexible enough to grow and change with you.

Value You are willing to pay for quality, which does not mean excessive fees, but fair remuneration for value received. There should be no hidden assessments, no charges later on when you discover that your contract fees cover only minimum service levels. You should require full disclosure. And the same recognition of value should be present in the costs incurred by your participants for investment management and fund administration.

THE Vanguard GROUP OF INVESTMENT COMPANIES℠

Where they stand on the pay scale, continued from page 3

Firm	Top financial officer	Amount
United Technologies	John A. Rolls	$640,830
	(Salary, $395,830; bonus, $245,000)	
NYNEX	Robert J. Eckenrode	$622,000
	(Salary, $377,000; bonus, $245,000)	
Dun & Bradstreet	Edwin A. Bescherer Jr.	$619,431
Eaton	Stephen R. Hardis	$610,945
Travelers	Thomas O. Thorsen	$600,000
Schlumberger	A. Lindenauer	$581,000
Marriott	William J. Shaw	$575,000
Ashland Oil	Paul W. Chellgren	$562,392
	(Salary, $342,094; bonus, $220,298)	
Deere	Eugene L. Schotanus	$547,714
	(Salary, $310,197; bonus, $237,517)	
Warner-Lambert	Robert J. Dircks	$545,917
McDonnell Douglas	Herbert J. Lanese	$526,762
Humana	William C. Ballard Jr.	$519,244
J.C. Penney	Robert E. Northam	$517,130
	(Salary, $399,771; bonus, $117,359)	
Campbell Soup	Edwin L. Harper	$511,558
Coca-Cola Enterprises	L.R. Cowart	$510,128
Sun Microsystems	William J. Raduche	$509,520
	(Salary, $270,000; bonus, $239,520)	
Grumman	Robert G. Freese	$497,663
	(Salary, $301,400; bonus, $196,263)	
Quaker Oats	Paul E. Price	$488,109
Paramount Communications	Ronald L. Nelson	$475,000
Martin Marietta	Marcus C. Bennett	$466,698
Cooper Industries	Dewain K. Cross	$455,541
Armco	Wallace B. Askins	$443,148
Dow Chemical	Enrique C. Falla	$436,428
Phelps Dodge	Thomas M. St. Clair	$418,684
	(Salary, $244,384; $174,300)	
Maytag	Jerry A. Schiller	$417,993
BellSouth	Harvey R. Holding	$413,000
	(Salary, $265,000; bonus, $148,000)	
Whirlpool	James R. Samartini	$411,733
Genuine Parts	Edward M. Jones	$406,146

Firm	Top financial officer	Amount
	Raymond J. McCann	$401,255
CBI Industries	George L. Schueppert	$401,035
Tyson Foods	Gerald Johnston	$392,059
AMAX	Stephen C. Knup	$387,366
	(Salary, $277,366; bonus, $110,000)	
Centel	Eugene H. Irminger	$379,300
	(Salary, $221,917; bonus, $157,383)	
Pacific Enterprises	Lloyd A. Levitin	$377,255
	(Salary, $321,000; bonus, $56,255)	
Sherwin-Williams	Thomas R. Miklich	$375,604
Wendy's International	John K. Casey	$373,969
Union Camp	James M. Read	$368,878
	(Salary, $296,978; bonus, $71,900)	
	Owen F. Shaffer	$367,490
Alcan Aluminium	Allan A. Hodgson	$366,163
	(Salary, $269,818; bonus, $96,345)	
ARCO Chemical	Marvin O. Schlanger	$360,798
Kerr-McGee	John C. Linehan	$353,678
Polaroid	William J. O'Neill Jr	$351,690
	(Salary, $328,706; bonus, $22,984)	
Sundstrand	Paul Donovan	$350,202
Stanley Works	R. Alan Hunter	$343,131
R.R. Donnelley & Sons	F.R. Jarc	$336,445
	Robert A. Dowdell	$332,510
AMP	Benjamin Savidge	$332,178
Tandem Computers	David J. Rynne	$328,409
Hershey Foods	M.F. Pasquale	$324,744
	(Salary, $212,500; bonus, $112,244)	
New York Times	David L. Gorham	$311,613
	(Salary, $270,000; bonus, $41,613)	
Tambrands	Raymond F. Wright	$306,216
Mead	William A. Enouen	$290,572
	(Salary, $223,872; bonus, $66,700)	
PNC Financial	Walter E. Gregg Jr.	$277,574
Johnson Controls	James M. Wade	$273,121
Becton, Dickinson	Robert A. Reynolds	$269,067
Texas Instruments	William A. Aylesworth	$265,550
Hartmarx	Jerome Dorf	$262,000
Fieldcrest Cannon	K. William Fraser Jr	$245,000
Universal Foods	Geoffrey Hibner	$243,525
Panhandle Eastern	J.B. Hipple	$219,179
NIPSCO Industries	Stephen P. Adik	$215,122
	(Salary, $162,000; bonus, $53,122)	
Long Island Lighting	George J. Sideris	$171,667

Salaries

Continued from page 3

riod, while Mr. Woodward's salary increased 15.5% from last year's $1.040 million level. Mr. McCorkindale's salary eked up to $1.03 million from $1.02 million in 1989. USX's Mr. Thomas saw his salary rise 6.4% from $968,000 in 1989.

The compensation paid to more than 150 chief financial officers of the country's leading industrial and financial service companies is highlighted in the accompanying table. Data for the survey came from 1990 proxy statements.

Salaries include base pay and annual bonus but exclude other long-term compensation. Not all CFOs are among the top five executives whose compensation is reported in proxies.

Mr. Graziano landed his $1.5 million windfall through an employment agreement under which he rejoined the company in 1990 after a two-year stint as CFO of Sun Microsystems Inc.

"We think he's one of the finest CFOs in the country if not in the world. . . . Because Apple is going through a major transformation in the way we do business (moving to a market share as opposed to a gross margin strategy), clearly our ability to manage complex and changing finances is vital so we need a real top-notch CFO, and obviously we should pay people commensurate with their ability," said Christopher Escher, a spokesman for Apple. Mr. Graziano had first worked for Apple in the early 1980s.

While the salaries of chief executive officers continue to climb beyond their already stratospheric heights even as corporate profits slip, CFO salaries have fallen from their more down-to-earth levels.

Rhoda Edelman, managing director, Pearl Meyer & Partners Inc., New York, an executive compensation consulting firm, said the total cash average of salary and bonuses of CFOs of Fortune 100 companies was $515,000 in 1990, down 8% from an average of $560,000 in 1989. Most of the decline stemmed from reduced bonuses. Total compensation, including long-term compensation, has dropped by about 3.6% to an average of $1.15 million vs. $1.19 million in 1989.

But stock option grants and awards increased by 15% in 1990, while restricted stock and performance awards declined. Total long-term compensation went up about 2%, according to Pearl Meyer.

A larger survey of CFOs of 350 companies by Towers Perrin, New York, found different results.

The median compensation, including salary and bonuses, was $413,000 in 1990, representing a 4.4% increase over 1989.

The median total direct compensation, including long-term incentive award payments such as stock options was $510,800, a 16.3% increase over 1989's $439,300. Stock option gains rose to a median of $210,100, a 10.3% increase from $190,400 in 1989, according to Towers Perrin.

Far and away the highest salaried chief executive for the second year in a row was Paul Fireman of Reebok International Ltd., with $14.822 million. Michael D. Eisner of Walt Disney Co. registered $11.233 million. Both men topped last year's *P&I* survey. In terms of long-term compensation, Stephen M. Wolf of UAL Corp. led the pack with a whopping $17.151 million, dwarfing his $1.15 million salary. ■

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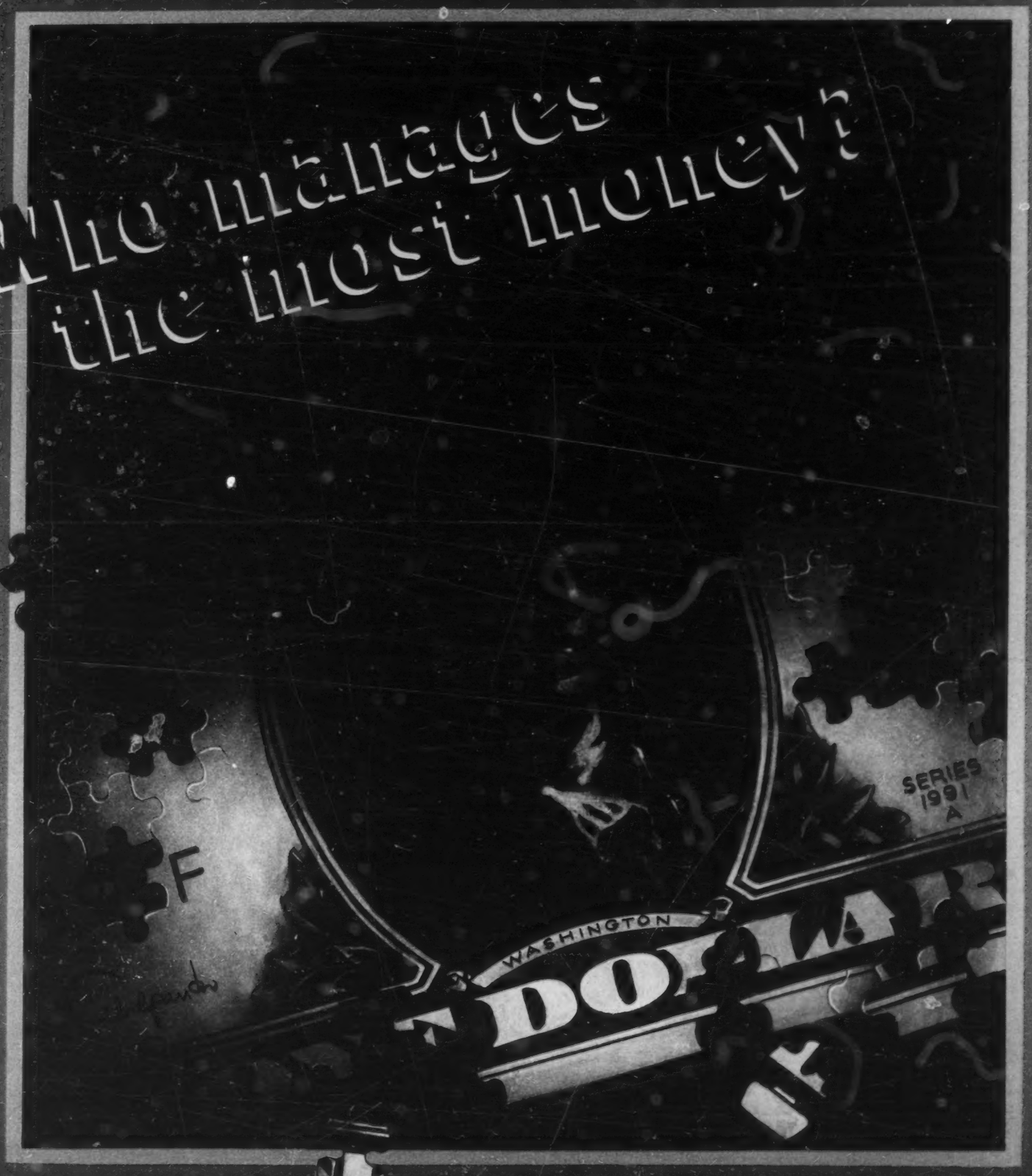

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ABP BPA

Managers endure stagnant year

International still a growth area

By Sabine Schramm

Growth of discretionary tax-exempt assets invested by money managers stalled in 1990, reflecting the effects of negative cash flow and poor investment returns in defined benefit plans.

Not surprisingly, international investments garnered the strongest growth rate, despite a volatile international equity market. Overall, assets invested abroad grew 6.9%, to $103.2 billion from $96.5 billion. International stocks grew a market-adjusted 26.5%, while bonds grew a market-adjusted 14.2%.

Discretionary tax-exempt assets managed by the 500 largest managers surveyed by *Pensions & Investments* grew a modest 0.8% to $2.122 trillion from $2.105 trillion; the amount run by the top 100 managers (also ranked by tax-exempt assets) grew 4.4% to $1.52 trillion from $1.456 trillion. In comparison, a benchmark portfolio based on market returns would have increased 2.6%. Discretionary tax-exempt assets under management grew much more in *P&I*'s previous survey: by 14.9% for the largest 500 and 13.8% for the top 100.

"Only public funds are making contributions," said Ron Peyton, president and chief executive officer of Callan Associates Inc., San Francisco. "Private funds are maxed out in making deductible contributions." According to Callan's data base, the median asset growth rate for public funds was 1.5% and for private funds, 1%.

Total discretionary assets, including taxable and tax-exempt, for the same 500 managers grew 8% to $3.751 trillion from $3.471 trillion; with the 100 largest managers gaining 7.6% to $2.597 trillion from $2.414 trillion.

The value of discretionary tax-exempt assets represented by the entire universe of managers surveyed dropped −0.6% to $2.162 trillion from $2.175 trillion. Total discretionary assets, including taxable assets, however, grew 10.7% to $3.948 trillion from $3.568 trillion, outpacing the market. A total of 1,013 managers are profiled in *P&I*'s survey. Managers without discretionary, tax-exempt assets under management were not listed.

The greater growth rate of total vs. tax-exempt discretionary assets can be traced to new cash sources invested with managers. Major corporations have been streamlining their operations by selling off subsidiaries, giving them an influx of cash to place with managers for short-term investments. Another growing source of assets for managers has been wealthy individuals.

The average asset mix for the largest 500 managers of discretionary, tax-exempt assets was 45% stocks, 29% bonds, 10% cash, 8% equity real estate, 2% mortgages, 3% mortgage-backed securities and 3% other investments.

That mix reflects a drop from last year's survey of two percentage points in stocks, with bonds picking up by that amount.

(The benchmark portfolio was constructed by measuring returns equal to 45% of the Standard & Poor's 500 Stock Index, 34% of the Shearson Lehman Brothers Government/Corporate Bond Index, 13% of the 90-day Treasury bill return and 8% of the Russell-NCREIF Property Index.)

Defined benefit plans have a net negative cash flow with benefit payments exceeding contributions, and defined benefit investment returns were not good last year, said Bob Penter, investment consultant at Hewitt Associates, Lincolnshire, Ill. "The only increase we expect is in the cash flow to defined contribution plans."

The negative cash flow has been borne out in *P&I*'s survey of the nation's largest pension funds (*P&I*, Jan. 21). In 1990, contributions to the Top 200 defined benefit plans were $31.1 billion, while benefits paid out were $44 billion; in 1989, contributions totaled $30.7 billion and benefit pay-outs, $41.1 billion.

Assets reported to *P&I* for 401(k) and 457 plans jumped 27.5% to $186.7 billion from $146.4 billion. That growth rate probably reflects better reporting methods on the part of managers rather than a huge increase of cash into the plans, said Mr. Penter.

"Defined contribution plans will continue to grow more than defined benefit plans as the number of plans grow," said Mr. Penter. As to the rate of that growth, Mr. Penter said it might be somewhat slower than it was in the '80s, because most major companies already have established defined contribution plans.

Despite the growth in 401(k)s, the amount of money in guaranteed investment contracts was down −0.5% to $143.9 billion from $144.6 billion. Growth in the GIC market has slowed as the market has matured (*P&I*, March 18).

Although international equity asset totals reported as of Jan. 1 fell −2.9% to $74.8 billion from $77 billion the previous year, the assets rose 26.5% when adjusted for the market. The Morgan Stanley Capital International Europe, Australia, Far East Index lost 23.2% last year.

The EAFE is heavily weighted toward Japanese equities, whose market losses drove the international index returns down. "Most funds were underweighted in Japan. The typical pension fund was down 10% to 15% because of the underweighting in Japan," said Callan's Mr. Peyton.

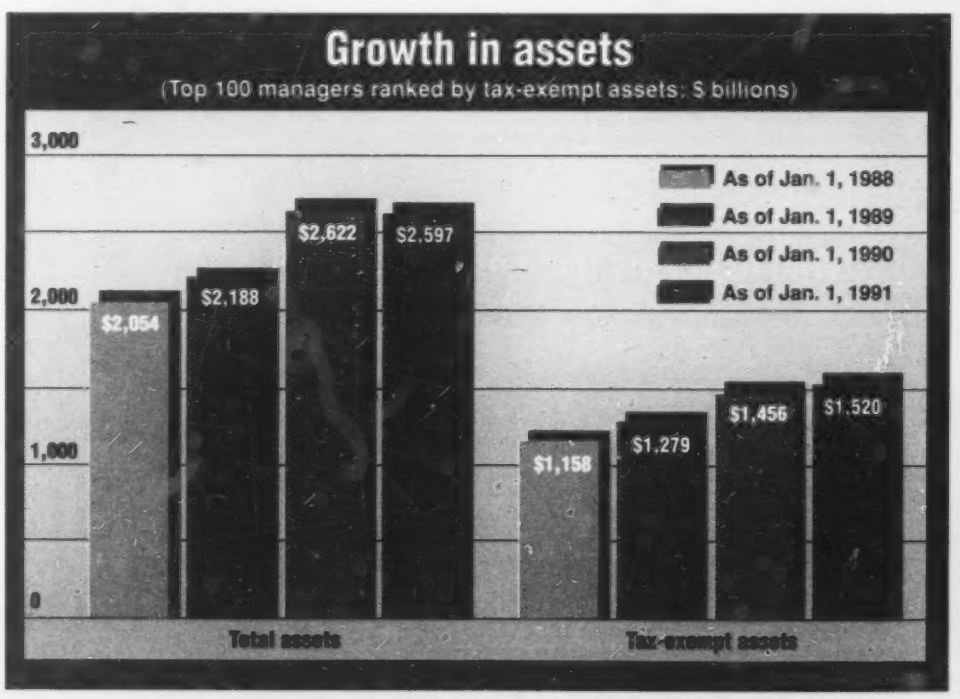
Although the Japanese market was down 39% last year, net commitments to international investments were up in 1990 over 1989 said Philip W. Tanner, consultant at The Wyatt Co.'s Atlanta office.

"This is a fascinating time for global managers," said Mr. Tanner. "There is a lot of growth and opportunity."

Emerging markets such as Mexico, Indonesia and Thailand offer investment opportunities. Eastern European economies will take a little while longer. Part of the attractiveness of international investment is seeing the long-term growth possibilities, Mr. Tanner said.

Assets invested in international bonds gained 36.5% to $22.8 billion from $16.7 billion. When adjusted to the Salomon Non-U.S. World Government Bond Index's return of 14.2%, bonds still had a sizable gain of 19.6%. International bond investments are mostly in the major economic market govern-

See **Managers** *on page 92*



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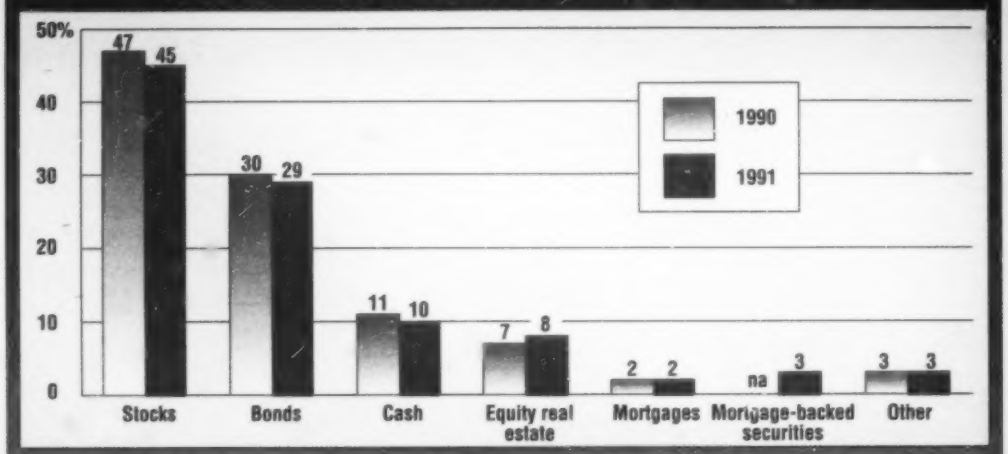
Profile statistics at a glance

Total managers profiled	**1,013**
Banks, trust cos. and subsidiaries	181
Insurance cos. and subsidiaries	101
Investment counselors	676
Canadian managers*	45
Minority-/female-owned firms	75
Total portfolio managers employed	**7,260**
Total security analysts employed	3,833
Stocks watched closely (average)	
By banks	255
By insurance cos.	255
By investment counselors	256
Stocks watched generally (average)	
By banks	820
By insurance cos.	1,106
By investment counselors	438
Percentage of in-house research (average)	
By banks	56
By insurance cos.	60
By investment counselors	68
No. of managers using options	**190**
No. of managers using stock index futures	104
No. of managers using fixed-income futures	**107**
Total discretionary assets managed internally ($ mils.)	3,949,139
Top 500	3,751,350
Top 100	2,597,410
Tax-exempt discretionary assets managed internally ($ mils.)	**2,161,561**
Top 500	2,121,568
Top 100	1,520,349
Tax-exempt discretionary assets managed internally ($ mils.)	
Banks, trust cos. and subsidiaries	729,494
Insurance cos. and subsidiaries	638,676
Investment counselors	793,391
Tax-exempt discretionary assets managed internally by Canadian managers ($ mils.)*	73,642
Real estate assets managed ($ mils.)	**207,275**
Equity real estate	105,252
Mortgages	102,023
Mortgage-backed securities assets managed ($ mils.)	86,699
Indexed assets managed ($ mils.)	**233,070**
Equity index	175,027
Bond index	58,043
International assets managed ($ mils.)	103,193
Equity	74,825
Bonds	22,821
Cash	5,547
Assets invested in GICs ($ mils.)	143,947
Assets invested for 401(k)/457 plans ($ mils.)	**186,685**
Assets invested in dedicated/immunized funds ($ mils.)	91,998

*All other data exclude Canadian managers

Top 500 money managers' average asset mix



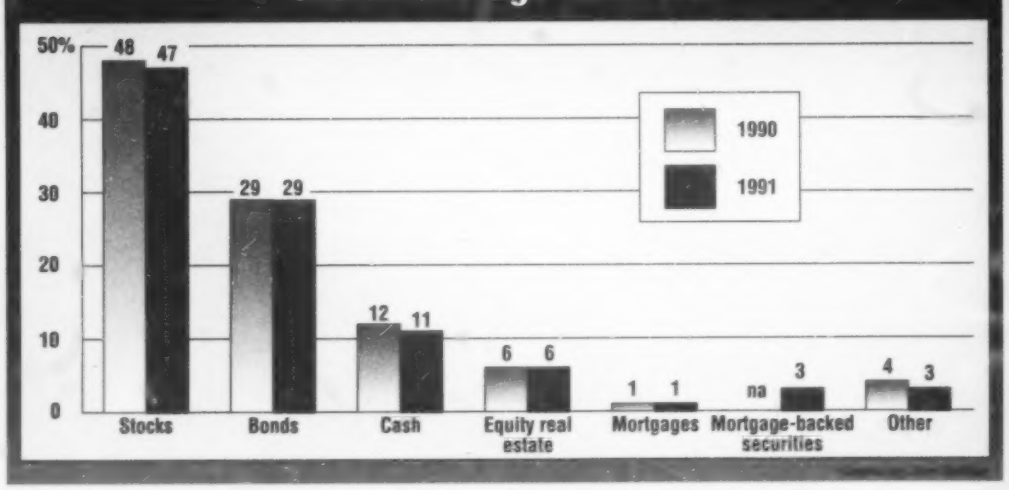
Tax-exempt asset mix (by adviser)

Institution	Banks	Insurance companies	Investment counslors
Stocks	40	38	50
Bonds	37	34	26
Cash	14	7	10
Equity real estate	3	7	7
Mortgages	1	5	1
Mortgage-backed securities	2	6	3
Other	3	3	3

Canadian asset mix

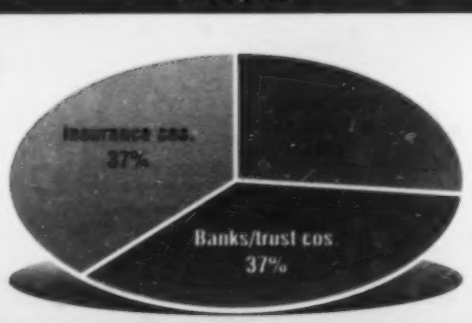
Canadian equities	31
U.S. equities	7
Bonds	35
Cash	10
Equity real estate	4
Mortgages	5
Mortgage-backed securities	1

Overall average asset mix



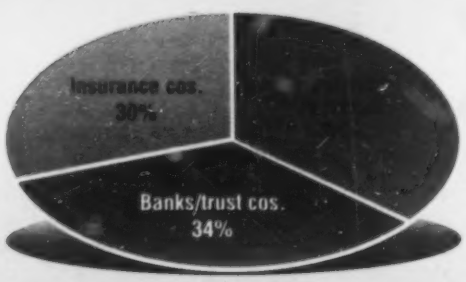
Who manages the money?

(the top 100)



Who manages the money?

(the top 500)



Statistics gathered from questionnaires

The data contained in the story, profiles, charts and tables in this special issue were developed by *Pensions & Investments* from answers to questionnaires.

Detailed questionnaires were sent to client contacts or chief investment officers at more than 2,300 banks, trust companies, insurance companies and independent investment firms in North America and abroad.

International/global and real estate managers are included in this issue, although *P&I* will publish separate, detailed directories on those subjects June 24 and Sept. 16, respectively.

Separately, *P&I* surveyed the largest investment firms in the country seeking the total amount of money they and their subsidiaries managed with full discretion for others, and identified the 100 largest. For insurance companies, this included the assets backing their insurance policies. For foreign firms, only the assets managed for U.S. clients were included.

Editorial staff members worked on this issue — the 18th annual directory — for almost five months.

All quantifiable answers to the questionnaires were entered into a spreadsheet program from which the charts, tables and other statistics were drawn. All information, except where noted, is as of Jan. 1.

As in previous years, managers were asked to provide the tax-exempt institutional asset mix; kinds and numbers of tax-exempt institutional clients; areas of investment capabilities; a description of their investment approaches to stocks, bonds and real estate, where appropriate; names and titles of the chief investment officer and client contact; the parent company, if any; and dollar amounts invested in categories such as equity real estate, mortgages, foreign investments, indexed funds and dedicated or immunized portfolios.

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The 100 largest managers in the U.S.

Ranked by total discretionary assets*

($ millions)

1. Prudential Insurance 209,572
2. American Express 141,500
3. Metropolitan Life 134,000
4. Equitable Assurance 130,000
5. Fidelity Management & Research ... 118,803
6. Bankers Trust Co. 113,906
7. Merrill Lynch & Co. 111,951
8. Sears Roebuck 103,030
9. J.P. Morgan 85,500
10. Wells Fargo Nikko 83,000
11. Aetna Life 80,126
12. BEA Associates 77,600
13. Kemper 68,600
14. Mellon Bank 66,000
15. Capital Group 60,000
16. PNC Financial 57,000
17. Vanguard Group 55,800
18. Morgan Stanley Group 53,500
19. The New England 53,000
20. John Hancock 52,652
21. State Street Bank 51,127
22. Travelers 50,823
23. Northern Trust 50,146
24. Scudder, Stevens & Clark 49,812
25. New York Life 47,366
26. Franklin Resources 46,432
27. GE Investments 45,000
28. Xerox 44,884
29. Banc One 44,000
30. Citicorp 43,600
31. United Asset Management 42,884
32. Putnam 41,985
33. Wellington Management 41,720
34. Pacific Mutual 37,100
35. Sun Life 35,600
36. Wells Fargo Bank 35,400
37. INVESCO MIM 33,690
38. T. Rowe Price Associates 31,572
39. CIGNA Investments 31,466
40. USF&G 29,700
41. Principal Financial Group 29,558
42. Primerica 29,406
43. Mitchell Hutchins 28,827
44. First Chicago 28,500
45. Chase Investors Management 28,283
46. Transamerica 27,800
47. Bank of New York 27,122
48. Boatmen's Trust 26,003
49. Lincoln National 25,903
50. Massachusetts Mutual 25,651
51. Sun Trust Banks 25,300
52. ITT 25,071
53. NCNB 25,000
54. Massachusetts Financial Services 24,637
55. Northwestern Mutual Life 23,079
56. Security Pacific 23,024
57. First Interstate Bancorp 22,260
58. Delaware Holding 21,900
59. Trust Co. of the West 21,200
60. Manulife Financial 21,188
61. Mutual of New York 21,132
62. CoreStates Financial 20,800
63. Harris Bankcorp 20,756
64. Ameritrust 20,447
65. Miller, Anderson & Sherrerd 20,310
66. Citizens & Southern/Sovran 20,020
67. Liberty Mutual 19,433
68. Goldman Sachs Asset 19,142
69. Great-West Life 18,043
70. Neuberger & Berman 17,843
71. US Trust Co. 17,500
72. National City 17,300
73. Lincoln Capital Management 17,050
74. Oppenheimer Management 16,600
75. Chemical Banking 16,400
76. AIM Capital Management 16,392
77. Fayez Sarofim 16,282
78. Daiwa International Capital 15,107
79. Templeton, Galbraith, Hansberger 15,000
80. Fischer Francis Trees & Watts 14,900
81. Sanford C. Bernstein 14,572
82. First Bank System 14,500
83. Brown Brothers Harriman 14,465
84. Lazard Freres 14,312
85. Brinson Partners 14,097
86. NBD Bank 13,600
87. Mutual Benefit Life 13,545
88. Lehman Ark Management 13,377
89. Oppenheimer Group 13,200
90. Marinvest 12,850
91. Shawmut National 12,700
92. Manufacturers National/Detroit 12,568
93. Fleet/Norstar Investment 12,500
94. Manufacturers Hanover Trust 12,113
95. Comerica 12,000
96. Continental Bank 11,500
97. Standish, Ayer & Wood 11,384
98. Provident Life & Accident 11,190
99. NWNL 10,721
100. Legg Mason 10,483

*U.S. domiciled firms include all discretionary assets managed for others. Firms domiciled abroad include only discretionary assets managed for U.S. clients. Subsidiaries have been included with their parent. Overlay and manager of manager assets have been excluded.

Managers ranked by tax-exempt* assets

	Firm	$ mils.
1.	Bankers Trust**	85,107
2.	Wells Fargo Nikko**	73,868
3.	Metropolitan Life	51,570
4.	Prudential Asset	48,765
5.	Aetna Life**	45,196
6.	State Street Bank**	45,007
7.	J.P. Morgan**	42,849
8.	Mellon Capital	29,195
9.	Fidelity Investments	28,960
10.	CIGNA Investments	28,409
11.	Pacific Investment Mgmt.	28,076
12.	Northern Trust**	27,401
13.	Alliance Capital**	27,122
14.	GE Investments**	27,085
15.	Equitable Capital	24,064
16.	Principal Financial	21,508
17.	Travelers**	21,434
18.	Mellon Bond	20,046
19.	Miller, Anderson Sherrerd	19,700
20.	Capital Guardian	19,554
21.	Jennison Associates	19,398
22.	John Hancock**	19,388
23.	Chase Investors**	19,042
24.	Equitable Real Estate	18,586
25.	Boston Co.	18,136
26.	Lincoln Capital	16,484
27.	Loomis Sayles	15,618
28.	Morgan Stanley Asset	15,116
29.	Delaware Investment	14,776
30.	Trust Co. of the West	14,710
31.	RCM Capital	14,673
32.	Massachusetts Mutual	14,531
33.	Fayez Sarofim	14,090
34.	Wellington Mgmt.	13,974
35.	Boatmen's Trust	13,558
36.	Chancellor Capital	13,482
37.	INVESCO MIM	13,424
38.	Fischer Francis Trees	13,400
39.	New York Life	13,315
40.	Brinson Partners	13,222
41.	Merrill Lynch Asset	12,770
42.	Lehman Ark	12,634
43.	Lazard Freres	12,497
44.	Bank of New York	12,300
45.	ANB Investment	12,257
46.	Capital Research & Mgmt.	12,231
47.	Prudential Fixed Income	12,195
48.	State Street Research	12,179
49.	Oppenheimer Capital**	12,137
50.	Sanford C. Bernstein	11,855
51.	NCNB**	11,100
52.	Scudder, Stevens & Clark	10,904
53.	Lincoln Nat'l	10,884
54.	Duff & Phelps	10,437
55.	T. Rowe Price Associates	10,230
56.	Copley Real Estate	10,000
57.	JMB Institutional Realty	9,729
58.	Mitchell Hutchins	9,262
59.	Franklin Advisers	9,195
60.	Transamerica Investment	9,095
61.	Harris Investment**	8,886
62.	PRIMCO Capital	8,500
63.	Neuberger & Berman	8,497
64.	Barrow, Hanley	8,415
65.	McMorgan	8,400
66.	NBD Bank	8,300
67.	PanAgora Asset	8,242
68.	Putnam	8,031
69.	Criterion Investment	7,943
70.	Provident Nat'l	7,835
71.	BEA Associates**	7,768
72.	Great-West Life	7,547
73.	MONY	7,524
74.	Security Pacific Investment	7,333
75.	Ameritrust	7,322
76.	Manufacturers Nat'l/Detroit	7,232
77.	Investment Advisers	7,100
78.	SunBank Capital	6,850
79.	Security Trust	6,703
80.	Kemper Financial	6,598

*Discretionary tax-exempt assets
**Assets underlying overlay programs not managed internally are not included.

Managers ranked by tax-exempt* assets

	Firm	$ mils.
81.	Continental Assurance	6,486
82.	Nationwide Life	6,469
83.	Dodge & Cox	6,344
84.	Hartford Life	6,300
85.	Grantham, Mayo, v.Otterloo	6,285
86.	Vanguard Group	6,147
87.	First Wachovia	6,058
88.	C&S/Sovran Trust	6,018
89.	Fleet/Norstar Investment	6,000
90.	Standish, Ayer & Wood	5,867
91.	Nat'l Investment Services	5,853
92.	Payden & Rygel	5,800
93.	Mutual Benefit Life	5,732
94.	Fiduciary Trust Int'l	5,639
95.	Rosenberg Institutional	5,513
96.	Heitman Advisory	5,500
97.	Stein Roe & Farnham	5,422
98.	Brown Brothers Harriman	5,394
99.	Prudential Realty	5,393
100.	Columbia Mgmt.	5,353
101.	MacKay-Shields Financial	5,330
102.	Mutual of America	5,274
103.	Pacific Mutual	5,251
104.	Morley Capital	5,233
105.	First Union Nat'l	5,100
106.	Sears Investment	4,987
107.	First Fidelity	4,873
108.	STW Fixed Income	4,707
109.	Trusco Capital	4,700
110.	Newbold's Asset	4,699
111.	Weiss, Peck & Greer	4,581
112.	Shields Asset	4,564
113.	Western Asset	4,559
114.	Bank One Indianapolis	4,500
115.	Glenmede Trust	4,500
116.	Aldrich, Eastman & Waltch	4,425
117.	Provident Investment	4,396
118.	Independence Investment	4,377
119.	Allstate Life	4,360
120.	Dimensional Fund	4,358
121.	State Mutual	4,282
122.	LaSalle Advisors	4,200
123.	IDS Equity/Fixed-Income	4,137
124.	First Asset Mgmt.	4,018
125.	Mississippi Valley	4,000
126.	Bear Stearns Asset	3,976
127.	Goldman Sachs Asset**	3,890
128.	Baring Int'l	3,889
129.	Discount Corp. of N.Y.**	3,770
130.	Denver Investment	3,767
131.	TCW Realty	3,742
132.	United Missouri	3,639
133.	Alex. Brown/Kleinwort	3,635
134.	Hotchkis & Wiley	3,564
135.	First Kentucky Trust	3,500
136.	Batterymarch Financial	3,475
137.	Mellon Equity	3,458
138.	United Capital	3,449
139.	Rowe Price-Fleming Int'l	3,424
140.	First Interstate/Washington	3,400
141.	Franklin Portfolio	3,400
142.	Manulife Financial	3,367
143.	The Phoenix	3,361
144.	Schroder Capital	3,304
145.	Old Kent Bank	3,250
146.	RREEF Funds	3,201
147.	Mercantile-Safe Deposit	3,182
148.	First Interstate/Calif.	3,140
149.	Luther King Capital	3,113
150.	Certus Financial	3,100
151.	Dewey Square	3,100
152.	Eagle Asset	3,064
153.	GAMCO Investors	3,008
154.	Lowe, Brockenbrough	3,005
155.	First Wisconsin Asset	3,000
156.	Kennedy Associates	3,000
157.	Smith Barney Capital	3,000
158.	Constitution Capital	2,994
159.	Connecticut Mutual	2,961
160.	Sovran Capital	2,950
161.	Wright Investors'	2,915
162.	Pittsburgh Nat'l Bank	2,900
163.	Wilshire Asset	2,852
164.	Forstmann-Leff	2,846
165.	Boylston Capital	2,845
166.	Nat'l City Bank	2,810
167.	Manning & Napier	2,805
168.	Corporate Property	2,800
169.	Trammell Crow Realty	2,800
170.	US Trust Co./New York	2,800
171.	Dreman Value	2,789
172.	IDS Trust	2,789
173.	Investment Counselors/Md.	2,757
174.	J & W Seligman	2,749
175.	Crestar Bank	2,693
176.	Dean Investment	2,611
177.	Kemper Asset	2,599
178.	Columbus Circle	2,592
179.	Cooke & Bieler	2,584
180.	Society Corp.	2,566
181.	Penn Mutual Life	2,564
182.	Yarmouth Group	2,550
183.	Nomura Capital	2,532
184.	Shearson Asset	2,530
185.	Confederation Life	2,505
186.	J.H. Ayres	2,500
187.	Geewax, Terker	2,500
188.	First Manhattan	2,450
189.	Cashman, Farrell	2,296
190.	WorldInvest	2,295
191.	Merganser Capital	2,290
192.	Warburg Investment	2,281
193.	Provident Capital	2,278
194.	Templeton Int'l	2,264
195.	Lord, Abbett	2,249
196.	T. Rowe Price Guaranteed	2,225
197.	Manufacturers Hanover	2,206
198.	Oechsle Int'l	2,200
199.	Sit Investment	2,196
200.	Morgan Grenfell Investment	2,191
201.	Texas Commerce	2,166
202.	AmSouth Bank	2,163
203.	Trinity Investment	2,106
204.	Advanced Investment**	2,100
205.	Washington Square	2,080
206.	McGlinn Capital	2,020
207.	Munder Capital	2,018
208.	Massachusetts Financial**	2,012
209.	Indiana Investment	1,991
210.	LaSalle Nat'l Trust	1,974
211.	Dalton, Greiner	1,958
212.	M&I Investment	1,935
213.	Nicholas-Applegate	1,926
214.	PRIMECAP Mgmt.	1,877
215.	Hibernia Nat'l Bank	1,873
216.	Connecticut Nat'l Bank	1,862
217.	W.R. Lazard	1,850
218.	Thompson, Siegel	1,821
219.	Jundt Associates	1,816
220.	Avatar Associates**	1,800
221.	Balcor	1,791
222.	First Pacific Advisors	1,763
223.	Olympic Capital	1,761
224.	Gardner & Preston Moss	1,733
225.	Global Fixed Income	1,710
226.	M.D. Sass**	1,695
227.	Pacific Financial Research	1,628
228.	Amalgamated Bank/N.Y.	1,624
229.	Koll Realty Advisors	1,610
230.	Wolf, Webb, Burk	1,604
231.	C&S Investment	1,580
232.	CSI Asset	1,569
233.	Union Labor Life	1,556
234.	Southeastern Asset	1,546
235.	Reams Asset	1,533
236.	BancOklahoma Trust	1,509
237.	Prudential Diversified	1,503
238.	Stacey Braun	1,502
239.	Hawaiian Trust	1,500
240.	Dreyfus Mgmt.	1,496
241.	QuantiLogic Asset**	1,494
242.	Meridian Investment	1,490
243.	Warburg, Pincus	1,467
244.	Strong/Corneliuson	1,461
245.	Latimer & Buck	1,437
246.	Chicago Title & Trust	1,429
247.	Concord Capital	1,428
248.	Securities Counsel	1,427
249.	Barnett Banks Trust	1,401
250.	Prudential Securities	1,400
251.	Sirach Capital	1,400
252.	First Quadrant	1,398
253.	O'Connor Group	1,394
254.	Hagler, Mastrovita	1,386
255.	Atlanta Capital	1,382
256.	Investors Research	1,374
257.	County NatWest**	1,373
258.	NWQ Investment	1,366
259.	Shearson Lehman	1,344
260.	Sentinel Real Estate	1,333
261.	C.S. McKee	1,331
262.	General American Life	1,326
263.	Institutional Capital	1,307
264.	Rainier Investment	1,301
265.	First Investment	1,283
266.	Ameritrust Texas	1,277
267.	One Federal Asset	1,270
268.	Aon Advisors	1,253
269.	Daniel Breen	1,252
270.	Pilgrim Baxter Greig	1,246
271.	Chicago Corp.	1,232
272.	Merchants Capital	1,220
273.	Riggs Investment	1,205
274.	Hoisington Investment	1,200
275.	Liberty Nat'l Bank	1,200
276.	Hellman, Jordan	1,195
277.	Public Storage	1,191
278.	Globe Finlay	1,182
279.	Lynch & Mayer	1,163
280.	Harris Associates	1,159
281.	Ruane, Cunniff	1,151
282.	Wilmington Trust	1,137
283.	Value Line Asset	1,131
284.	Atalanta/Sosnoff	1,121
285.	American Capital Mgmt.	1,110
286.	Smoot, Miller, Cheney	1,110
287.	First Interstate/Ore.	1,100
288.	Union Capital Advisors**	1,100
289.	Brundage, Story & Rose	1,068
290.	MPT Associates	1,061
291.	Wedge Capital	1,060
292.	Fred Alger	1,058
293.	Westwood Mgmt.	1,050
294.	Eaton, Vance	1,038
295.	Morgan Grenfell Capital	1,034
296.	Northern Capital	1,033
297.	Reich & Tang	1,025
298.	Richmond Capital	1,022
299.	Boston Int'l	1,020
300.	Renaissance Investment	1,013
301.	Baring America	1,012
302.	Peregrine Capital	1,009
303.	Consistent Asset	1,000
304.	Jones Lang Wootton	1,000
305.	Commerce Bank	997
306.	Mellon McMahan	988
307.	Security Capital	972
308.	Back Bay Advisors	968
309.	Glickenhaus	960
310.	W.H. Reaves	959
311.	Hamilton, Allen	956
312.	Lehndorff & Babson	953
313.	Roll & Ross Asset	939
314.	GeoCapital	932
315.	ICH Capital	930
316.	Brandywine Asset	925
317.	Fiduciary Mgmt. Associates	925
318.	William Blair	924
319.	Karsten Realty	924
320.	First Nat'l/Md.	917
321.	Harbor Capital	912
322.	Wardley Investment	908
323.	Spears, Benzak, Salomon	906
324.	Hanson Investment	904
325.	Wilmington Capital	903
326.	Continental Capital	900
327.	Lee, Robinson & Steine	900
328.	L.J. Melody	900
329.	Beacon Capital	899
330.	Wertheim Schroder	894
331.	Morgan Stanley/Chicago	876
332.	Frontier Capital	875
333.	OFFITBANK	867
334.	David J. Greene	856
335.	Merus Capital	856
336.	Federated Investment	854
337.	Argus Investors	850
338.	Axe-Core Investors	848
339.	Seattle Capital	831
340.	Property Capital	830
341.	Hill Samuel/Investment	827
342.	Donald Smith	813
343.	Waddell & Reed Asset	811
344.	Cabot Partners	810
345.	Reimer & Kroger	805
346.	Capital Growth	803
347.	Ariel Capital	800
348.	Bessemer Trust	800
349.	First Nat'l/Omaha	800
350.	Vaughan, Nelson	800
351.	MarInvest	798
352.	AMR Investment	796
353.	McCowan Associates	796
354.	Chicago Asset	785
355.	Lexington Mgmt.	785
356.	Ashland Mgmt.	778
357.	Lieber	754
358.	McCullough Andrews	750
359.	HD Int'l	747
360.	Weaver C. Barksdale	734

*Discretionary tax-exempt assets

**Assets underlying overlay programs not managed internally are not included.

Managers ranked by tax-exempt* assets

	Firm	$ mils.
361.	Citibank Investment**	732
362.	Ryan Labs	727
363.	Equitable Agri-Business	726
364.	Financial Counselors	722
365.	KR Capital Advisors	718
366.	Daniel S. Kampel	717
367.	Peters Gamm West	716
368.	John A. Levin	713
369.	Julius Baer	712
370.	NCM Capital	711
371.	Signet Asset	706
372.	TSA Capital**	706
373.	CB Commercial Realty	701
374.	Tukman Capital	700
375.	Metrix Capital	696
376.	SAFECO Asset	686
377.	Anhalt/O'Connell	679
378.	SCN Capital	679
379.	Valley Capital	666
380.	Schaenen Wood	658
381.	Franklin Asset	650
382.	Wells Fargo Realty	646
383.	CMB Investment	637
384.	Selected Financial	610
385.	Amerindo Investment	608
386.	Independence One	608
387.	Montag & Caldwell	607
388.	Huntington Trust	600
389.	Hawthorne Associates	595
390.	Unity Mgmt.	590
391.	IDS Int'l	580
392.	Dreyfus Realty	570
393.	Minton Investment	568
394.	Bennett & Kahnweiler	567
395.	Bowen, Hanes	551
396.	Arnhold/S. Bleichroeder	550
397.	Rosen Associates	550
398.	United Jersey Bank	550
399.	First Alabama Bank	547
400.	Philippe Investment	542
401.	Securities Counselors/Iowa	536
402.	Estabrook Capital	535
403.	PMRealty Advisors	526
404.	Investment Research	527
405.	Todd Investment Advisors	525
406.	Beutel, Goodman Int'l	520
407.	Caniral Trust	520
408.	Colorado Capital	520
409.	Johnson Investment	520
410.	Sound Shore	519
411.	General American Investors	518
412.	Dominion Trust	515
413.	MIG Realty Advisors	513
414.	Investment Advisors	510
415.	PCM Int'l	508
416.	Abbott Capital	507
417.	Daiwa Int'l Capital	501
418.	American Nat'l/Chatt.	500
419.	Hilliard Lyons	500
420.	Horsley Keogh Associates	500
421.	Leavy Investment	500
422.	Windham Capital	500
423.	NewSouth Capital	499
424.	Siebel Capital	495
425.	Amerilas Investment	494
426.	Capital Consultants	488
427.	Beutel, Goodman Capital	486
428.	Frolay, Revy Investment	480
429.	Kidder Peabody Asset**	480
430.	APAM	476
431.	Parametric Portfolio	475
432.	Boston Overseas Investors	467
433.	Cutler	466
434.	Quest Advisory	461
435.	Smith Affiliated Capital	457
436.	Capital Investment Services	455
437.	Ferguson Wellman Rudd	450
438.	First Commerce	450
439.	SBC Portfolio Mgmt.	450
440.	Palley-Needelman	448
441.	N.M. Rothschild Int'l**	448
442.	Sterling Capital	440
443.	Crabbe Huson	437
444.	G.T. Capital	434
445.	George D. Bjurman	432
446.	R. Meeder	432
447.	INTECH	431
448.	West One Trust	426
449.	Pinnacle Associates	425
450.	PSM Investors	425
451.	Deposit Guaranty Nat'l	417
452.	Portfolio Group	416
453.	Retirement System	406
454.	Nikko Capital (USA)	402
455.	Investment Counsel	401
456.	Fiduciary Capital	400
457.	First Interstate/Ariz.	400
458.	Freedom Capital	400
459.	Marvin & Palmer	400
460.	Schroder Real Estate	400
461.	Yeager, Wood & Marshall	400
462.	Amalgamated Trust	390
463.	First Reserve	383
464.	Roanoke Asset	380
465.	Trevor Stewart Burton	380
466.	Lombard Odier Int'l	377
467.	Rittenhouse Financial	377
468.	Axe-Houghton	375
469.	Leylegian Investment	375
470.	Markston Investment	373
471.	James Investment	372
472.	Southeast Bank	370
473.	AFL-CIO Housing Bldg	364
474.	Amervest	360
475.	Cambiar Investors	359
476.	Madison Investment	358
477.	Roger Engemann	357
478.	JMC Capital	357
479.	Bank of Tokyo Trust	355
480.	Fisher Investments	355
481.	Cowen Asset	352
482.	Dearden Maguire	350
483.	Van Kampen Merritt	350
484.	Ward & Wiesner	347
485.	Kur. Mebach	337
486.	Metric Institutional Realty	337
487.	Penn Capital	338
488.	Pioneering Mgmt.	335
489.	Magten Asset	332
490.	Nicholas	330
491.	Bank IV	320
492.	Composite Resea[illegible]	325
493.	Princeton Bank	324
494.	Rothschild	324
495.	Gulf Investment	321
496.	INVESCO MIM Int'l	319
497.	Spare, Tengler, Kaplan	319
498.	Wood, Struthers	316
499.	Heartland Capital	315
500.	Inverness Counsel	313
501.	Dunedin Fund	310
502.	FirsTier Bank, Lincoln	310
503.	Burnham	300
504.	Petersen, Flynn	300
505.	Roulston	300
506.	Townley Capital	300
507.	Mark Twain Bank	300
508.	Bridgewater Asset**	298
509.	Murray Johnstone Int'l	297
510.	Robert W. Baird	293
511.	Stratton Mgmt.	289
512.	Income Research & Mgmt.	286
513.	Kleinwort Benson Int'l	286
514.	U.S. Trust/Calif.	285
515.	Voyageur Asset	285
516.	Shearson Equity	280
517.	Mount Lucas	279
518.	Hutson Mgmt.	275
519.	Resource Investments	275
520.	Wilson, Kemp	275
521.	Garrett Realty	272
522.	American Asset	270
523.	SSI	270
524.	First Midwest Asset	265
525.	Haven Capital	261
526.	Golder, Thorne & Cressey	257
527.	Cadence Capital	256
528.	Emerging Markets	255
529.	Bank South	252
530.	Flippin, Bruce & Porter	252
531.	Posthorn Global Asset**	251
532.	FFCA Institutional	250
533.	Rice, Hall, James	250
534.	Fox Asset	245
535.	U.S. Nat'l/Galveston	245
536.	J.M. Hartwell	243
537.	Seaboard Investment	242
538.	Van Eck	241
539.	P.E. Becker	240
540.	Nelson, Benson & Zellmer	240
541.	Tempest, Isenhart	239
542.	Cadinha	237
543.	First Wisconsin Trust	233
544.	Anchor Capital	229
545.	Davis Hamilton Jackson	228
546.	Yamaichi Int'l	228
547.	1st Source Bank	227
548.	Austin & Calvert	226
549.	Campbell, Reed, Connor	225
550.	Dillon, Read Int'l	225
551.	Pacific Financial Asset	224
552.	William D. Witter	224
553.	Burridge Group	223
554.	Richard Fontaine	220
555.	Moran Asset	220
556.	Crawford Investment	217
557.	NFJ Investment Group	216
558.	Baxter Capital	214
559.	BMI Capital	212
560.	Greenwood Capital	210
561.	Virginia Investment	210
562.	First Nat'l/Amarillo	207
563.	Jenswold, King	206
564.	Turner Neill	206
565.	Scimitar North American	205
566.	Acorn Asset**	204
567.	IDS Growth Spectrum	204
568.	Alan Snidner	204
569.	Am Cal Advisors	203
570.	Burgess Capital	202
571.	Martingale Asset	202
572.	Aronson + Fogler	200
573.	Charles River	200
574.	Carl Domino	200
575.	M.D. Hirsch	200
576.	Torch Energy	200
577.	Woodmont Realty	200
578.	Kahn Brothers	196
579.	Salomon Brothers	196
580.	Greenleaf Capital	192
581.	AMB Institutional Realty	190
582.	Roxbury Capital	183
583.	Summit Trust	183
584.	Widmann, Siff	176
585.	Marin Currie	173
586.	Hallmark Capital	173
587.	Alpha Source	170
588.	Chase Investment Counsel	168
589.	Gradison Investment	167
590.	Davis, Weaver & Mendel	165
591.	Narragansett Capital	165
592.	Pritchard, Herr	165
593.	Foxhall Investment	161
594.	Investment Counselors	160
595.	Security Pacific Real Estate	160
596.	Biricher Realty	159
597.	Mackenzie Investment	157
598.	Jamieson Eaton & Wood	152
599.	Gabelli Senior Fixed	151
600.	Amoskeag Bank	150
601.	Mesirow Asset	150
602.	Taplin, Canida	150
603.	Target Investors	150
604.	Cohen & Steers	149
605.	Compu-Val	148
606.	NM Capital	147
607.	Nat'l Bank-Commerce	146
608.	Marshall & Sullivan	145
609.	BZW Investment	144
610.	First Coast Capital	144
611.	Rocky Mountain	140
612.	Winrich Capital	140
613.	Cutugno & Associates	136
614.	Kempner Capital	136
615.	Abel/Noser	135
616.	Longfellow Investment	135
617.	Prime Asset**	135
618.	Delafield Asset	134
619.	Paradigm Partners	134
620.	George B. Springman	132
621.	Argus Investment	131
622.	Cramer Rosenthal	130
623.	Ivory & Sime Int'l	130
624.	Ambs Investment	129
625.	Willoughby Holin	128
626.	First NH Investment	127
627.	Howe & Rusling	126
628.	Beekman Capital	125
629.	Blackstone Financial	125
630.	Gateway Investment	125
631.	Legg Mason Capital	125
632.	Montgomery Asset	125
633.	Balch, Hardy**	124
634.	Boyd, Arnold	124
635.	Merchants Bank	123
636.	Columbus Bank	121
637.	Systematic Financial	121
638.	Thompson/Rudnstein	121
639.	AIM Capital	119
640.	Breau Capital	118

*Discretionary tax-exempt assets
**Assets underlying overlay programs not managed internally are not included.

Managers ranked by tax-exempt* assets

	Firm	$ mils.
641.	London Investment	116
642.	MIMLIC Asset	116
643.	Trinity Capital	115
644.	Schroder Ventures	112
645.	Financial Mgmt.	111
646.	1345 Realty	110
647.	Leshner Financial	110
648.	Cedar Hill Associates	109
649.	Hourglass Capital	109
650.	Trust Co./Okla.	109
651.	Twin Capital	109
652.	Duncan-Hurst Capital	108
653.	IAA Trust	105
654.	Credit Suisse Asset	104
655.	EMG Advisors	103
656.	Bell Capital	101
657.	Merchants Nat'l Bank	101
658.	Windsor Realty	101
659.	Batterymarch: Agrivest	100
660.	Churchill Mgmt.	100
661.	First Nat'l/Gainesville	100
662.	First Nat'l/Rockford	100
663.	Marathon Asset	100
664.	Southport Financial	100
665.	Swanson Capital	100
666.	E. Scott Urdang	100
667.	Denis Wong	100
668.	Allbritton Capital	97
669.	Thompson, Unger	97
670.	Cook Inlet	96
671.	Jacobs Levy Equity	94
672.	C.J. Lawrence	88
673.	Sit/Kim Int'l	87
674.	Campbell, Cowperthwait	86
675.	Corbyn Associates	85
676.	Financial Aims	85
677.	Jurika & Voyles	85
678.	Armstrong Shaw	83
679.	Global Asset	83
680.	Reid McCoy	83
681.	Salem Capital	82
682.	Starbuck Tisdale	82
683.	D.A. Management	81
684.	Geometry Asset	80
685.	Matuschka**	80
686.	Bishop Trust	79
687.	Gintel Equity	79
688.	Daniel H. Renborg	78
689.	U.S. Bank	78
690.	Heritage Investors	77
691.	Oak Hall Capital	77
692.	Sullivan Money Mgmt.	77
693.	Vilas-Fischer Associates	77
694.	MTH Asset Mgmt.	76
695.	Brouwer & Janachowski	75
696.	Dawson-Samberg	75
697.	ICM Asset	75
698.	Mercantile Nat'l/Ind.	75
699.	Smith Breeden Associates	75
700.	Davenport Co./Va.	74
701.	Interfid Capital	74
702.	Bank of Ireland Asset	72
703.	Capitalcorp Asset	72
704.	RXR Capital	72
705.	AIG Global Investors	71
706.	Institutional Portfolio	70
707.	Star Bank/E. Indiana	70
708.	United Nat'l Bank	70
709.	CIMG	69
710.	Becker Van Etten	64
711.	Bradford Investment	62
712.	Delta Financial	61
713.	Executive Investment	60
714.	Marathon, London	60
715.	Morse, Williams	60
716.	Snyder Capital	60
717.	Sullivan, Morrissey	60
718.	Valenzuela Capital	60
719.	Interinvest	59
720.	LVM Capital	59
721.	American Income Plus	58
722.	Cumberland Advisors	58
723.	IDC Portfolio	58
724.	Nelson Capital	58
725.	Bounty Mgmt.	57
726.	Calcasieu Marine	57
727.	Kanne, Paris & Hoban	57
728.	C.H. Brown	56
729.	Dawes Investment	56
730.	Kunath Karren Rinne	55
731.	Lipman, Carasso	55
732.	McBryan Malone	55
733.	GIM Global	54
734.	Hambrecht & Quist	54
735.	Llama Asset	54
736.	CIC Asset	53
737.	Connors Investor	53
738.	Peckham Boston	52
739.	Robshaw & Cheskin	52
740.	Henderson Administration	51
741.	PaineWebber Asset	51
742.	Thorson, Brown	51
743.	BTR Capital	50
744.	City Capital Counseling	50
745.	Fiduciary Counsel	50
746.	Liquidity Fund	50
747.	London & Bishopsgate	50
748.	Parmelee Mgmt.	50
749.	T.O. Richardson	50
750.	U.S. Trust Co./Texas	50
751.	Geneva Capital	49
752.	Realty Income Advisors	49
753.	Bank of the West	48
754.	Conus & Nicholson	48
755.	Forest Investment	47
756.	Bankers Trust/Des Moines	45
757.	DJ Investment	45
758.	Mt. Auburn	45
759.	Phoenix Investment	45
760.	Spectrum Asset	45
761.	Philadelphia Investment	43
762.	AFA Financial	42
763.	Davidson Capital	42
764.	Kanawha Capital	42
765.	Marshall Plan	42
766.	R.W. Graybill	41
767.	Marlborough Capital	41
768.	Cullen Fortier	40
769.	Emprise Bank	40
770.	ERIAC	40
771.	Granahan Investment	40
772.	Greenwich Asset	40
773.	Lehigh Valley Bank	40
774.	Pierson Capital	40
775.	Richter Asset Management	40
776.	Ronald Sadoff	40
777.	Smith-Hines Investment	40
778.	Tiffany Capital	40
779.	Berg Capital	39
780.	Capital Investment Advisors	39
781.	Justin Asset	39
782.	Cabanne Smith	39
783.	Summit Investment	38
784.	Edgewood Mgmt.	37
785.	Pension Mgmt.	37
786.	Schabacker Investment	37
787.	Chesapeake Investment	35
788.	John Stewart Darrell	34
789.	Strategic Property	34
790.	Guaranty Trust/Mo.	33
791.	Heilweil Hollander	33
792.	Piedmont Capital	32
793.	James River Capital	31
794.	Bane, Barham, Holloway	30
795.	Meridian Capital	30
796.	Perkins Capital	30
797.	Smith, Graham	30
798.	Zevenbergen Capital	30
799.	Baillie Gifford Overseas	29
800.	Mitchell Capital	29
801.	MSR Advisors	29
802.	Buffalo Capital	28
803.	Northwest Quadrant	28
804.	Davidson, Garrard	27
805.	Solon Asset	27
806.	Union Capital	27
807.	Berents Capital	25
808.	Capital Strategy Group	25
809.	Cartwright & Goodwin	25
810.	Central Bank Denver	25
811.	Cohen, Davis & Marks	25
812.	Cornerstone Asset	25
813.	Dorsey	25
814.	GW Capital	25
815.	Parker Dillon Carlson	25
816.	Rock Capital Mgmt.	25
817.	Van Cleef Jordan & Wood	25
818.	Devon Institutional	24
819.	MH & Associates	24
820.	Newgate Mgmt.	24
821.	Sabi Weil Investment	24
822.	Van Strum & Towne	24
823.	McMillion Capital	23
824.	Vector Money Mgmt.	23
825.	Fraser Mgmt.	22
826.	R.M. Leary	22
827.	Steele	22
828.	Fine Capital	21
829.	Furgueson Capital	21
830.	Computime Institutional	20
831.	Hodges Capital	20
832.	IDS Research Core/Agg.	20
833.	Steiner Diamond Asset	20
834.	K.S. Sweet	20
835.	American Fund	19
836.	Addison Capital	18
837.	W.A. Haker	18
838.	Princeton Investment	18
839.	Rayner Associates	18
840.	Eagle Capital	17
841.	Equity Investment	17
842.	Wilkinson Boyd**	17
843.	Baron Capital	16
844.	Hamilton Mgmt.	16
845.	Oakwood Counselors	16
846.	Prudential Asia	16
847.	WFG Investment	16
848.	American Agricultural	15
849.	Fenimore Asset	15
850.	Trendstat Capital	15
851.	Palm Beach Investment	14
852.	Trascott, Alyson, Craig	14
853.	Wagner & Hamil	14
854.	Berger Associates	13
855.	Karpus Investment	13
856.	Keeley Asset	13
857.	Stratton Capital	13
858.	John M. Cunningham	12
859.	GeoVest Advisors	12
860.	Wm. A. Inskeep	12
861.	Sheffield Investment	12
862.	Simpson Capital	12
863.	Walnut Asset	12
864.	EverGreen Capital	11
865.	IDS Financial Services	11
866.	Laidlaw Holdings	11
867.	Kenwood Group	11
868.	Cornell Capital	10
869.	Schuylkill Capital	10
870.	Touche Remnant	10
871.	Connecticut Investment	9
872.	Ewing Capital	9
873.	Leonard Mgmt.	9
874.	Quaker Capital	9
875.	Boston Security	8
876.	Ariston Capital	7
877.	Holt-Smith & Renk	7
878.	Mendel Money Mgmt.	7
879.	UBS Phillips & Drew Int'l	7
880.	David E. Ware	7
881.	Allegiance Capital	6
882.	Cashen Investment	6
883.	Eads & Heald	6
884.	Galleon Capital	6
885.	Alan B. Lancz	6
886.	Platner & Associates	6
887.	Ramsay Investment	6
888.	Reiser-Builder/Russell	6
889.	RPI Institutional	6
890.	Tealwood Asset	6
891.	Welsh Money Mgmt.	6
892.	Albion Mgmt.	5
893.	Investors Research	5
894.	Lee Asset	5
895.	Mitchell Group	5
896.	Oak Ridge Investments	5
897.	RAC Advisors	5
898.	RhumbLine Advisors	5
899.	Dollins Symons	4
900.	J.C. Goodgal	4
901.	KAS Investment	4
902.	Newport Pacific	4
903.	North American Capital	4
904.	Cash Int'l	3
905.	Mosa Capital	3
906.	Ferguson Investment	2
907.	Nicholson Group	2
908.	TEL Advisors	2
909.	Clean Yield Asset	1
910.	First Austin Capital	1
911.	Kankelu Scudder Capital	1
912.	New Generation Advisors	1
913.	Townsend Asset	1
914.	Nakagama & Wallace	1
915.	Chrysalis Investments	***
916.	Yasuda Bank/Trust (USA)	***
917.	Howard & McInnes	***
	Total	**2,161,381**

*Discretionary tax-exempt assets
**Assets underlying overlay programs not managed internally are not included.
***Less than $500,000.

A

Abbott Capital Management
75 Second Ave., Suite 408, Needham, Mass. 02194; (617) 449-1171

Total assets managed	$958,000,000
Total discretionary	$511,000,000
Total tax-exempt assets	$954,000,000
Total discretionary tax-exempt	$507,000,000
Tax-exempt clients	11
Types of accounts managed	CG
Minimum separate account	$20,000,000
No. of portfolio managers	4
Size of research staff	2

Abbott Capital Management L.P. is a limited partnerships manager.

The firm uses in-depth analyses of the management teams to manage 10- to 12-year venture capital, buy-out and special situation partnerships.

The asset mix Jan. 1 was 100% venture capital, buy-out and special situation partnerships.

Raymond L. Held is chief investment officer; Stanley E. Pratt is client contact.

Abel/Noser Corp.
90 Broad St., 23rd Floor, New York, N.Y. 10004; (212) 344-2610

Total assets managed	$135,000,000
Total discretionary	$135,000,000
Total tax-exempt assets	$135,000,000
Total discretionary tax-exempt	$135,000,000
Tax-exempt clients	4
Types of accounts managed	CJ
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	5

Abel/Noser Corp., an active equity manager, uses a quantitative approach emphasizing low p/e ratios. It invests in undervalued stocks with high earnings potential and recently reported earnings surprises, using a ranking system with manual override when significant adverse information is published.

Eugene A. Noser Jr. is chief investment officer; Richard T. McSherry is client contact.

ACA Capital Management
300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1750

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Acorn Asset Management
2000 N. Woodward Ave., Suite 110, Bloomfield Hills, Mich. 48304; (313) 540-4410

Total assets managed	$491,000,000
Total discretionary	$446,000,000
Total tax-exempt assets	$204,000,000
Total discretionary tax-exempt	$204,000,000
401(k)/457 assets managed	$48,000,000
Tax-exempt clients	191
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	6
Size of research staff	2

Acorn Asset Management Corp. is an active equity, active fixed-income, balanced and option overwriting manager.

Its equity focus is on companies selling at low price to discretionary cash flow, price to book and long-term debt to capitalization. Growth characteristics are emphasized.

It writes index options to provide additional returns and some downside market protection. The amount of options written is adjusted based upon an analysis system.

The firm runs $1 billion of discretionary tax-exempt assets in options overwriting programs. None of the assets is managed internally or included in the assets above.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

Robert Skandalaris is chief investment officer.

Addison Capital Management
1608 Walnut St., 13th Floor, Philadelphia, Pa. 19103; (215) 735-2121

Total assets managed	$163,000,000
Total discretionary	$128,000,000
Total tax-exempt assets	$19,000,000
Total discretionary tax-exempt	$18,000,000
401(k)/457 assets managed	$18,000,000
Tax-exempt clients	5
Types of accounts managed	CE
Minimum separate account	$200,000
No. of portfolio managers	3

Addison Capital Management is an active equity and balanced manager.

The firm's value-oriented, diversified equity approach favors stocks showing strong price and earnings momentum. In fixed income, the firm uses a high-quality, laddered maturity approach.

The asset mix Jan. 1 was 94% stocks, 2% bonds and 4% cash.

The firm follows 175 stocks closely and 3,900, generally; 90% of research is generated internally.

Radcliffe Cheston is chief investment officer; James V. Kelly is client contact.

Advanced Investment Management
2 Oliver Plaza, Suite 2020, Pittsburgh, Pa. 15222; (412) 762-2415

Total assets managed	$2,100,000,000
Total discretionary	$2,100,000,000
Total tax-exempt assets	$2,100,000,000
Total discretionary tax-exempt	$2,100,000,000
Equity indexed assets	$1,200,000,000
Fixed-income indexed assets	$30,000,000
Tax-exempt clients	36
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	5

Advanced Investment Management is an active and passive equity, passive fixed-income, balanced and short-term manager.

Its active equity approach is quantitative, emphasizing momentum. Its fixed-income approach strives to replicate the Shearson Lehman Brothers Government/Corporate Bond Index.

The firm runs range-limit hedging and managed-return portfolio strategies on $650 million, for which it manages $250 million of the underlying assets.

The asset mix Jan. 1 was 85% stocks, 10% bonds and 5% cash.

The firm follows 100 stocks closely and 400, generally; 85% of the research is generated internally.

The parent is PNC Financial Corp..

J. Thomas Allen is chief investment officer; David A. Mathews is client contact.

Aetna Capital Management
145 King St. W., 14th Floor, Toronto, Ontario M5H 3T7; (416) 864-8360

Total assets managed	$1,303,000,000
Total discretionary	$760,000,000
Total tax-exempt	$436,000,000
Total discretionary tax-exempt	$436,000,000
For subsidiaries of U.S. firms	$93,000,000
Equity real estate assets	$70,000,000
Mortgage assets	$79,000,000
Non-North American bonds	$9,000,000
Tax-exempt clients	32
U.S. subsidiaries	2
Types of accounts managed	CU
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	1

Aetna Capital Management, a Canadian firm, is an active equity and fixed-income, balanced, real estate, mortgage, U.S. equity and short-term manager.

Its equity approach emphasizes individual stock selection based on fundamental value considerations. About 20% to 25% of the decision is based on the economic and market environment.

Its fixed-income approach is to select the proper sector structure and term exposure within acceptable risk/reward limitations.

For real estate, it offers closed-end funds for direct ownership of up to 75% of a property.

It follows 100 stocks closely; 80% of research is generated internally.

The parent is Aetna Life Insurance Co. of Canada.

Peter Stuart is chief investment officer; David Wright is client contact.

Aetna Life Insurance Co.
151 Farmington Ave., Hartford, Conn. 06156; (203) 273-0123

Total assets managed	$89,301,000,000
Total discretionary assets	$80,126,000,000
Total tax-exempt assets	$45,196,000,000
Discretionary tax-exempt	$45,196,000,000
GICs	$12,462,000,000
Annuities	$8,634,000,000
Equity real estate assets	$4,289,000,000
Mortgage assets	$17,042,000,000
International equity assets	$528,000,000
Equity indexed assets	$849,000,000
Fixed-income indexed assets	$359,000,000
Dedicated/immunized assets	$62,000,000
Mortgage-backed assets	$2,395,000,000
401(k)/457 assets managed	$12,219,000,000
Tax-exempt clients	4,885
Types of accounts managed	CEFGJ
Minimum separate equity account	$5,000,000
Minimum separate bond account	$25,000,000
No. of portfolio managers	17
Size of research staff	24

Aetna Life Insurance Co. is an active and passive domestic and international/global equity, active and passive domestic fixed-income, balanced, real estate, short-term, GIC and asset allocation manager.

Its active domestic equity approach identifies securities with improving earnings and growth expectations and purchases them at favorable relative valuation levels.

Its active domestic fixed-income approach uses sector rotation and individual securities selection to control market risk and maximize total return.

Options and financial futures are used. Aetna runs $4.939 billion in a hedging strategy of which it manages $300 million of the underlying assets.

Its real estate activities include direct ownership and joint ventures, as well as participating and fixed-rate mortgages involving all major types of income-producing properties.

The separate account asset mix Jan. 1 was 50% stock, 37.5% bonds, 5% equity real estate and 7.5% international stocks.

The insurer follows 100 stocks closely and 250, generally; all research is generated internally.

The parent is Aetna Life & Casualty.

Daniel P. Kearney is chief investment officer; John E. Arant is client contact. The data above include statistics for the following subsidiaries:

● Aetna Capital Management International Ltd., with $528 million in tax-exempt assets, uses centralized asset and country allocation with regional sector and stock selection to add value. Country and stock selection are based on economic, fundamental value and technical analysis with a view toward identifying markets and stocks with high but undervalued expected returns.

Philip R. Roberts is chief investment officer; Mr. Arant is client contact.

● Aetna Capital Management Inc.

25 largest independent managers

Firm	$ mils.*
FMR-Fidelity Investments	28,960
GE Investments	27,085
Miller, Anderson	19,700
Boston Co.	18,136
Lincoln Capital	16,484
Morgan Stanley Asset	15,116
Delaware Investment	14,776
Fayez Sarofim	14,090
Wellington	13,974
INVESCO MIM	13,424
Fischer Francis	13,400
Brinson Partners	13,222
Merrill Lynch Asset	12,770
Lehman Ark	12,634
Lazard Freres	12,497
Capital Research	12,231
Oppenheimer Capital	12,137
Sanford C. Bernstein	11,855
Scudder, Stevens & Clark	10,904
Duff & Phelps	10,437
T. Rowe Price Associates	10,230
JMB Institutional Realty	9,729
Mitchell Hutchins	9,282
Franklin Advisers	9,195
PRIMCO Capital	8,500
Total	**350,768**

*Discretionary tax-exempt assets

AFA Financial Inc.
525 Hanna Bldg., 1422 Euclid Ave., Cleveland, Ohio 44115; (216) 861-1050

Total assets managed	$157,000,000
Total discretionary	$67,000,000
Total tax-exempt assets	$132,000,000
Total discretionary tax-exempt	$42,000,000
Tax-exempt clients	196
Types of accounts managed	CPGJ
Minimum separate account	$100,000
No. of portfolio managers	4

AFA Financial Inc. is an active equity and balanced manager.

The firm focuses on the dividend yield as the primary criterion for buying and selling stocks, believing that preserving capital in down markets is as critical as enhancing capital in up markets. The philosophy is sustained through the purchase of quality securities that represent value and the diversification of each portfolio. Its fixed-income approach is defensive.

The asset mix Jan. 1 was 78% stocks and 22% cash.

The firm follows 50 stocks closely and 200, generally; 75% of the research is generated internally.

The parent is AFA Capital Corp.

James M. Mendell is chief investment officer; James A. Hammett is client contact.

AFL-CIO Housing & Building Investment Trusts
1717 K St., N.W., Suite 707, Washington, D.C. 20006; (202) 331-8055

Total assets managed	$364,000,000
Total discretionary	$364,000,000
Total tax-exempt assets	$364,000,000
Total discretionary tax-exempt	$364,000,000
Mortgage assets	$84,000,000
Mortgage-backed assets	$236,000,000
Tax-exempt clients	244
Types of accounts managed	GJ

AFL-CIO Housing & Building Investment Trusts is a real estate manager.

It provides current income and long-term appreciation through investments in construction loans, mortgages, mortgage-backed securities, participating mortgages and equity real estate.

In addition to the assets listed above, Riggs National Bank of Washington has investment responsibility for $90 million of the trust's assets.

The asset mix Jan. 1 was 12.21% cash, 23.01% mortgages and 64.78% mortgage-backed securities.

William C. Tutt is chief investment officer; Mike Arnold is client contact.

AIG Global Investors Inc.
200 Liberty St., 1 World Financial Center, 19th Floor, New York, N.Y. 10281; (212) 266-0400

Total assets managed	$13,300,000,000
Total discretionary	$1,782,000,000
Total tax-exempt assets	$71,000,000
Total discretionary tax-exempt	$71,000,000
International equity assets	$70,000,000
International cash assets	$1,000,000
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	10
Size of research staff	4

AIG Global Investors Inc. is an active domestic and international equity and fixed-income and balanced manager.

The firms equity approach seeks quality growth stocks that are liquid and have broad support bases, then thematically focuses portfolios on countries/industries expected to outperform respective indexes. Its fixed-income approach considers currency the most important asset allocation factor. Proprietary models indicate appropriate weightings.

The asset mix Jan. 1 was 98% stocks and 2% cash.

The firm follows 350 stocks closely and 700, generally; 50% of the research is generated internally.

The parent is American International Group.

Richard B. Goodwyn is chief investment officer; Ronald J. Davi is client contact.

AIM Capital Management
11 Greenway Plaza, Suite 1919, Houston, Texas 77046; (713) 626-1919

Total assets managed	$16,392,000,000
Total discretionary	$16,392,000,000
Total tax-exempt assets	$119,000,000
Total discretionary tax-exempt	$119,000,000
401(k)/457 assets managed	$77,000,000
Tax-exempt clients	5
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	8

AIM Capital Management is an active equity and active bond manager.

Its equity approach uses growth and emerging growth stocks that are monitored on the basis of earnings momentum and relative market strength.

In fixed income, the firm creates overdiversified portfolios loaded with lower-quality issues to capitalize on yield premiums and buys convertibles, seeking a high level of current income exceeding yields in the equity market.

The asset mix Jan. 1 was 8% stocks and 92% bonds.

The parent is AIM Management Group Inc.

Michael Licopantis is chief investment officer; Gary T. Crum is client contact.

Albion Management Group
667 East 100 South, Suite 12, Salt Lake City, Utah 84102; (801) 328-3700

Total assets managed	$43,000,000
Total discretionary	$39,000,000
Total tax-exempt assets	$8,000,000
Total discretionary tax-exempt	$5,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	14
Types of accounts managed	C
Minimum separate account	$250,000
No. of portfolio managers	2

Albion Management Group is an active equity, active fixed-income and balanced manager.

Its equity approach searches for unrecognized value. Portfolios have a three-tier design consisting of a conservative core, long-term growth and near-term appreciation opportunities. Its fixed-income approach is based on three objectives: preservation of capital, current income and appreciation of the portfolio.

The asset mix Jan. 1 was 57.8% stocks, 21.3% bonds and 20.9% cash.

The firm follows 100 stocks closely and 200, generally; all research is generated internally.

William Toby Levitt is chief investment officer; Debra Knotts is client contact.

Aldrich, Eastman & Waltch
225 Franklin St., Boston, Mass. 02110; (617) 261-9000

Total assets managed	$4,620,000,000
Total discretionary	$4,620,000,000
Total tax-exempt assets	$4,425,000,000
Total discretionary tax-exempt	$4,425,000,000
Equity real estate assets	$1,015,000,000
Mortgage assets	$3,410,000,000
Tax-exempt clients	59
Types of accounts managed	CEG
Minimum separate account	$100,000,000

Aldrich, Eastman & Waltch Inc., a real estate manager, creates portfolios of managed investments that reflect clear market needs and meet specific client objectives. The firm's fixed-rate, commercial mortgage programs are designed to capitalize on market inefficiencies and withdrawal of traditional lenders to create portfolios of direct and secondary market investments.

The asset mix Jan. 1 was 25% equity real estate and 75% mortgages.

Richard F. Burns is chief investment officer; Robert J. Hannan is client contact.

Fred Alger Management Inc.
75 Maiden Lane, New York, N.Y. 10038; (212) 806-8800

Total assets managed	$1,443,000,000
Total discretionary	$1,443,000,000
Total tax-exempt assets	$1,058,000,000
Total discretionary tax-exempt	$1,058,000,000
Mortgage-backed assets	$19,000,000
Tax-exempt clients	22
Types of accounts managed	CFGJ
Minimum separate account	$200,000
Size of research staff	20

Fred Alger Management Inc. is an active equity and bond, balanced, short-term and convertible manager.

It offers growth and small-cap equity management. Portfolios are invested in rapidly growing companies, and stock selection is based on bottom-up, in-depth fundamental analysis.

Its fixed-income approach is based on interest rate anticipation, sector analysis and credit research, seeking to achieve consistent, above-average returns through active maturity and sector selection.

The asset mix Jan. 1 was 83.6% stocks, 8% bonds, 6.6% cash and 1.8% mortgage-backed securities.

The firm follows 1,400 stocks closely and 1,400, generally; all research is generated internally.

The parent is Fred Alger & Co. Inc.

Fred M. Alger III is chief investment officer; Matthew A. Gotwols is client contact.

Allbritton Capital Management Associates
1 Galleria Tower, 13355 Noel Road, Suite 1345, LB71, Dallas, Texas 75240; (214) 392-7288

Total assets managed	$100,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$97,000,000
Total discretionary tax-exempt	$97,000,000
International fixed-income	$6,000,000
International cash assets	$14,000,000
Tax-exempt clients	2
Types of accounts managed	EF
Minimum separate account	$5,000,000
No. of portfolio managers	1

Allbritton Capital Management Associates Inc. is an active equity, active domestic and international fixed-income, balanced and domestic and international short-term manager.

Its equity approach is quantitative and value-oriented, using time-proven, fundamental analysis. In fixed income, it uses maturity and duration analysis.

Edwin A. Allbritton is chief investment officer and client contact.

Allegiance Capital Inc.
7777 Center Ave., Suite 230, Huntington Beach, Calif. 92647; (714) 898-0134

Total assets managed	$120,000,000
Total discretionary	$120,000,000
Total tax-exempt assets	$6,000,000
Total discretionary tax-exempt	$6,000,000
Mortgage-backed assets	$4,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$2,000,000
No. of portfolio managers	2

Allegiance Capital Inc., an active fixed-income manager, manages high-grade and mortgage-only portfolios, taking minimal duration risk, adding value by altering portfolio maturities and actively rotating sectors across the entire high-quality and mortgage universe. Fixed-income futures are used.

The asset mix Jan. 1 was 40% Treasury bonds and 60% mortgage-backed securities.

William Mawhorter is chief investment officer; Bob Southard is client contact.

Alliance Capital Management L.P.
1345 Avenue of the Americas, New York, N.Y. 10105; (212) 969-1140

Total assets managed	$46,264,000,000
Total discretionary	$43,914,000,000
Total tax-exempt assets	$29,112,000,000
Discretionary tax-exempt	$27,122,000,000
International equity assets	$1,545,000,000
International fixed-income	$114,000,000
Equity indexed assets	$6,286,000,000
Fixed-income indexed assets	$20,000,000
Tax-exempt clients	312
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	43
Size of research staff	28

Alliance Capital Management L.P. offers active and passive equity and fixed-income management both domestically and internationally, as well as balanced, short-term, tactical asset allocation, venture capital and convertible securities management.

Its growth stock approach seeks to invest in two- to three-year relative earnings strength at an early stage and at a reasonable price. The firm provides disciplined equity products and a full range of domestic and international products.

In fixed income, the firm manages market risk by limiting duration deviations from market. Value is added through heavy sector concentrations and opportunity trading.

Options and financial futures are used.

The firm provides currency hedging and options overwriting strategies on $8.15 billion in assets, for which it manages the underlying assets.

The asset mix Jan. 1 was 73.8% stocks, 10.7% bonds and 15.5% other investments.

The firm follows 350 stocks closely and 700, generally; 70% of the research is generated internally.

The parent is The Equitable.

Bruce W. Calvert is chief investment officer; Carol A. Zipkin is client contact.

Allstate Life Insurance Co.
Allstate Plaza West, Northbrook, Ill. 60062; (708) 402-2568

Total assets managed	$14,800,000,000
Total discretionary assets	$14,800,000,000
Total tax-exempt assets	$4,360,000,000
Total discretionary tax-exempt	$4,360,000,000
GICs	$3,068,000,000
Annuities	$1,291,000,000

Allstate Life Insurance Co. is a manager of guaranteed investment contracts and annuities for pension plan terminations.

The parent is Sears, Roebuck & Co.

Gary Fridley is chief investment officer; Thomas K. Heau is client contact.

Alpha Source Asset Management

2 N. LaSalle St., Chicago, Ill. 60602; (312) 368-5411

Total assets managed	$215,000,000
Total discretionary	$215,000,000
Total tax-exempt assets	$170,000,000
Total discretionary tax-exempt	$170,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	10
Types of accounts managed	CJ
Minimum separate account	$1,000,000
No. of portfolio managers	4

Alpha Source Asset Management is an active equity, bond and balanced account manager.

Its equity approach emphasizes growth and emerging growth stocks, and uses Graham & Dodd analysis. Its fixed-income approach is based on interest rate anticipation. Options are used.

The asset mix Jan. 1 was 30% stocks, 65% bonds and 5% cash.

The firm follows 50 stocks closely and 100, generally; 50% of the research is generated internally.

The parent is Household International.

Paul H. Fricke is chief investment officer.

Am Cal Advisors Inc.

700 N. Brand Blvd., Glendale, Calif. 91203; (818) 990-3250

Total assets managed	$212,000,000
Total discretionary	$203,000,000
Total tax-exempt assets	$212,000,000
Total discretionary tax-exempt	$203,000,000
Equity real estate assets	$57,000,000
Mortgage assets	$146,000,000
Tax-exempt clients	12
Types of accounts managed	J
Minimum separate account	$20,000,000

Am Cal Advisors Inc., a real estate manager, seeks to preserve capital and enhance values through quality asset management with emphasis on cash-on-cash return.

The asset mix Jan. 1 was 27.6% equity real estate and 72.4% mortgages.

The parent is Glenfed Service Corp.

James B. McKenna is chief investment officer; Robert Samuel is client contact.

Amalgamated Bank of New York

11-15 Union Square, New York, N.Y. 10003; (212) 255-6200

Total assets managed	$1,624,000,000
Total discretionary assets	$1,624,000,000
Total tax-exempt assets	$1,624,000,000
Total discretionary tax-exempt	$1,624,000,000
Tax-exempt clients	139
Types of accounts managed	J
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	4

Amalgamated Bank of New York is an active short/intermediate fixed-income manager, emphasizing interest rate anticipation and maturity selection. It seeks to generate attractive current income, avoid losses and conserve principal.

Richard Cohen is chief investment officer and client contact.

Amalgamated Trust and Savings Bank

1 W. Monroe St., Chicago, Ill. 60603; (312) 822-3222

Total assets managed	$390,000,000
Total discretionary assets	$390,000,000
Total tax-exempt assets	$390,000,000
Total discretionary tax-exempt	$390,000,000
Tax-exempt clients	55
Types of accounts managed	GJ
No. of portfolio managers	21

Amalgamated Trust and Savings Bank is an active equity, active fixed-income, short-term and balanced manager.

Its equity approach combines buy recommendations of research analysts with a multifactor model to produce a portfolio undervalued from both a quantitative and qualitative perspective. Its fixed-income approach uses high-quality intermediate maturities, sector selection and relative value trading.

The asset mix Jan. 1 was 5% stocks, 80% bonds and 15% cash.

Robert J. Schank is chief investment officer and client contact.

AMB Institutional Realty Advisors

505 Montgomery St., San Francisco, Calif. 94111; (415) 394-9000

Total assets managed	$917,000,000
Total discretionary	$190,000,000
Total tax-exempt assets	$230,000,000
Total discretionary tax-exempt	$190,000,000
Equity real estate assets	$165,000,000
Mortgage assets	$25,000,000
Tax-exempt clients	13
Types of accounts managed	CEF
Minimum separate account	$15,000,000
No. of portfolio managers	2
Size of research staff	1

AMB Institutional Realty Advisors, a real estate manager, focuses on above-average current returns available from investing in fully leased, medium-sized retail, industrial and office properties in supply constrained submarkets of major metropolitan areas with initial yields of 150 to 300 basis points above larger properties of comparable quality.

The asset mix Jan. 1 was 87% equity real estate and 13% mortgages.

Hamid R. Moghadam is chief investment officer; T. Robert Burke is client contact.

Ambs Investment Counsel

1501 McKay Tower, Grand Rapids, Mich. 49503; (616) 454-4535

Total assets managed	$203,000,000
Total discretionary	$188,000,000
Total tax-exempt assets	$129,000,000
Total discretionary tax-exempt	$129,000,000
Tax-exempt clients	38
Types of accounts managed	CEF
Minimum separate account	$400,000
No. of portfolio managers	3

Ambs Investment Counsel Inc. is an active equity and fixed-income, balanced and short-term manager.

The firm's equity approach emphasizes growth and low p/e stocks. The fixed-income approach focuses on quality issues with maturities offering the most attractive risk/return over the near term.

The asset mix Jan. 1 was 37% stocks, 45% bonds and 18% cash.

The firm follows 40 stocks closely and 100, generally; 25% of the research is generated internally.

Keith L. Ambs is chief investment officer and client contact.

American Agricultural Investment Management

631 E. Butterfield, Suite 302, Lombard, Ill. 60148; (708) 810-0040

Total assets managed	$24,000,000
Total discretionary	$15,000,000
Total tax-exempt assets	$15,000,000
Total discretionary tax-exempt	$15,000,000
Equity real estate assets	$15,000,000
Tax-exempt clients	2
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	2

American Agricultural Investment Management Co. Inc., a farmland equity manager, selects prime income-producing farmland, diversified geographically and by commodity, in five selected agricultural areas.

The asset mix Jan. 1 was 100% farmland.

H. Joseph Bourn is chief investment officer; Paula Marie Tomasky is client contact.

American Asset Management

200 Public Square, 26th Floor, Suite 3500, Cleveland, Ohio 44114; (216) 781-8899

Total assets managed	$573,000,000
Total discretionary	$542,000,000
Total tax-exempt assets	$270,000,000
Total discretionary tax-exempt	$270,000,000
Tax-exempt clients	297
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	5

American Asset Management is an active equity, active fixed-income and balanced manager.

Its conservative equity approach emphasizes high-quality securities, selective diversification, low p/es, above average yields, earnings visibility and high asset values. Its fixed-income approach is based on interest rate anticipation and uses securities with maturities of less than 10 years.

The asset mix Jan. 1 was 50% stocks, 45% bonds and 5% cash.

The firm follows 50 stocks closely and 200, generally; 50% of the research is generated internally.

James DiFiore is chief investment officer; Joseph Thomas is client contact.

American Capital Management & Research

2800 Post Oak Blvd., Houston, Texas 77056; (713) 993-0500

Total assets managed	$12,067,000,000
Total discretionary assets	$11,644,000,000
Total tax-exempt assets	$1,110,000,000
Total discretionary tax-exempt	$1,110,000,000
401(k)/457 plan assets	$66,000,000
Types of accounts managed	CEFG
No. of portfolio managers	13
Size of research staff	11

American Capital Management & Research Inc. is an active equity, active-fixed income, tactical asset allocation and short-term manager.

Its equity approach seeks to generate consistently above-average performance through the integration of quantitative investment techniques with traditional forms of investment management.

Its fixed-income department manages government, mortgage, corporate and high-yield investment portfolios, to provide an attractive blend of high current return and above-average total return.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

25 largest banks and trust cos.

Firm	$ mils.*
Bankers Trust	85,107
Wells Fargo	74,514
Mellon Bank	53,629
State Street	45,007
J.P. Morgan	42,849
Northern Trust	27,401
Capital Guardian Trust	19,554
Chase	19,042
Trust Co./West	18,452
Boatmen's Trust	13,558
Bank of New York	13,199
American Nat'l/Chicago	12,257
First Interstate	11,807
NCNB	11,100
C&S/Sovran	10,548
TSB Group	9,309
Harris Trust	8,886
Ameritrust	8,599
Nat'l Bank/Detroit	8,300
PNC Financial	7,798
Manufacturers Nat'l	7,507
Security Pacific	7,493
SunTrust Banks	7,350
Security Trust	6,703
Nat'l City	6,310
Total	**536,279**

*Discretionary tax-exempt assets, including subsidiaries

The asset mix Jan. 1 was 15% stocks, 67% bonds and 18% cash.

The firm follows 200 stocks closely and 600, generally; all research is generated internally.

The parent is Primerica Corp.

Robert C. Peck Jr. and Alan T. Sachtleben are chief investment officers; Janet M. Young is client contact.

American Fund Advisors

50 Broad St., Suite 1637, New York, N.Y. 10004; (212) 482-8100

Total assets managed	$127,000,000
Total discretionary	$127,000,000
Total tax-exempt assets	$19,000,000
Total discretionary tax-exempt	$19,000,000
Tax-exempt clients	14
Types of accounts managed	C
Minimum separate account	$400,000
No. of portfolio managers	3

American Fund Advisors Inc. is an active equity, balanced and technology manager.

Its primary equity approach emphasizes emerging growth stocks analyzed through Graham & Dodd principles. It has a value orientation, emphasizing technology and aviation. The focus is on cash flow and margin normalization. Its fixed-income approach is passive.

The asset mix Jan. 1 was 85% stocks, 3% bonds and 12% cash.

The firm follows 900 stocks closely and 400, generally; 40% of the research is generated internally.

Barry J. Gordon is chief investment officer; Marc H. Klee is client contact.

American Income Plus Inc.

1111 Chester Ave., Suite 810, Cleveland, Ohio 44114; (216) 241-6010

Total assets managed	$65,000,000
Total discretionary	$65,000,000
Total tax-exempt assets	$58,000,000
Total discretionary tax-exempt	$58,000,000
401(k)/457 assets managed	$7,000,000
Tax-exempt clients	67
Types of accounts managed	CFJ
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	1

American Income Plus Inc. is an active equity and balanced manager.

The firm buys large-cap stocks that have uninterrupted dividend histories of 10 years, less than 50% long-term debt and are at the higher end of their historical yield cycle. In balanced accounts, its fixed-income approach uses a pooled GIC fund.

The asset mix Jan. 1 was 88% stocks and 12% cash.

The firm follows 100 stocks closely and 450, generally.

Robert C. Smith is chief investment officer; Stephen A. Malbasa is client contact.

American National Bank & Trust Co.

736 Market St., P.O. Box 1638, Chattanooga, Tenn. 37401; (615) 757-3722

Total assets managed	$1,211,000,000
Total discretionary assets	$1,211,000,000
Total tax-exempt assets	$500,000,000
Total discretionary tax-exempt	$500,000,000
401(k)/457 plan assets	$28,000,000
Tax-exempt clients	325
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	8
Size of research staff	2

American National Bank & Trust Co. is an active equity, active bond, balanced and short-term cash manager.

Its growth-oriented, large-cap equity approach uses sector rotation and emphasizes stocks with above-average historical growth and strong fundamentals that are selling at low relative multiples. Its fixed-income approach involves the full range of maturities; holdings are shifted based on interest rate anticipation, credit/sector swaps and yield curve analysis.

The asset mix Jan. 1 was 40% stocks, 45% bonds and 15% cash.

The bank follows 160 stocks closely and another 160, generally; 15% of research is generated internally.

The parent is SunTrust Banks Inc.

Andrew J. Muldoon III is chief investment officer; James A. Woods is client contact.

Amerindo Investment Advisors inc.

388 Market St., Suite 950, San Francisco, Calif. 94111; (415) 362-0292

Total assets managed	$608,000,000
Total discretionary	$608,000,000
Total tax-exempt assets	$608,000,000
Total discretionary tax-exempt	$608,000,000
Tax-exempt clients	36
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	4

Amerindo Investment Advisors Inc., an active equity manager, emphasizes emerging growth stocks and invests in companies involved in applied sciences and technologies.

The asset mix Jan. 1 was 93% stocks and 7% cash.

The firm follows 45 stocks closely and 250, generally; 70% of research is generated internally.

Alberto W. Vilar is chief investment officer; James C. Vogelzang, (303) 629-1900, is client contact.

Ameritas Investment Advisors Inc.

P.O. Box 81889, Lincoln, Neb. 68501; (402) 467-6980

Total assets managed	$1,199,000,000
Total discretionary	$1,199,000,000
Total tax-exempt assets	$494,000,000
Total discretionary tax-exempt	$494,000,000
Equity real estate assets	$30,000,000
Mortgage assets	$87,000,000
Mortgage-backed assets	$101,000,000
401(k)/457 assets managed	$37,000,000
Tax-exempt clients	298
Types of accounts managed	CGJ
Minimum separate account	$500,000
No. of portfolio managers	5
Size of research staff	3

Ameritas Investment Advisors Inc. is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach is active, emphasizing large-cap, high-quality stocks. Portfolios have broad exposure to the market and are diversified by sector and number of issues.

Its fixed-income approach is active, using sector analysis. Investment-grade securities with maturities of less than 15 years are used, with emphasis on private placements and commercial mortgages.

For real estate, it seeks joint ventures in regional markets with local partners.

The asset mix Jan. 1 was 4% stocks, 41.2% fixed income, 8.2% cash, 6.1% equity real estate, 17.6% mortgages, 20.4% mortgage-backed securities and 2.5% venture capital.

The firm follows 50 stocks closely and 200, generally; 25% of the research is generated internally.

The parent is Ameritas Life Insurance Co.

Jon C. Headrick is chief investment officer; John F. Leonhardt is client contact.

Ameritrust Co. N.A.

900 Euclid Ave., P.O. Box 5937, Cleveland, Ohio 44101; (216) 737-4089

Total assets managed	$12,350,000,000
Total discretionary assets	$12,350,000,000
Total tax-exempt assets	$7,322,000,000
Total discretionary tax-exempt	$7,322,000,000
Equity indexed assets	$74,000,000
Dedicated/immunized assets	$16,000,000
Mortgage-backed assets	$138,000,000
401(k)/457 plan assets	$1,623,000,000
Tax-exempt clients	203
Types of accounts managed	CEFGJ
Minimum separate account	$3,000,000
No. of portfolio managers	13
Size of research staff	12

Ameritrust Co. N.A. is an active and passive equity, active fixed-income, balanced, short-term, GIC and convertible securities manager.

For equities, it constructs broadly diversified portfolios consisting of low p/e issues with dividend return and fundamental value providing superior long-term performance while limiting downside risk. The fixed-income approach, based on interest rate anticipation, stresses quality and a maturity structure.

The asset mix Jan. 1 was 51% stocks, 20% bonds, 17% cash, 9% convertible securities and 3% mortgage-backed securities.

The bank follows 300 stocks closely and 700, generally; 75% of research is generated internally.

The parent is Ameritrust Corp.

Richard C. Hyde is chief investment officer; Gary W. Queen is client contact.

The *P&I*/InterSec 300 will be published Aug. 5.

Ameritrust Texas

P.O. Box 2320, Dallas, Texas 75221-2320; (214) 712-3460

Total assets managed	$15,171,000,000
Total discretionary	$8,097,000,000
Total tax-exempt assets	$3,910,000,000
Total discretionary tax-exempt	$1,277,000,000
Equity real estate assets	$16,000,000
International equity assets	$23,000,000
International fixed-income	$7,000,000
401(k)/457 assets managed	$248,000,000
Tax-exempt clients	1,263
Types of accounts managed	CFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	5

Ameritrust Texas is an active domestic and international equity and fixed-income, passive domestic equity, balanced, real estate, tactical asset allocation and short-term manager.

Its equity approach is quantitative, using growth and emerging growth stocks. Its fixed-income approach uses sector analysis.

Its real estate approach actively manages income-producing properties.

The asset mix Jan. 1 was 55% stocks, 11% bonds, 32% cash and 2% equity real estate.

The firm follows 100 stocks closely and 2,000, generally.

The parent is Ameritrust Corp.

Richard M. Siefert is chief investment officer; Duane Cunningham is client contact.

Amervest Co. Inc.

1875 Century Park East, Suite 1740, Los Angeles, Calif. 90067; (213) 552-7972

Total assets managed	$360,000,000
Total discretionary	$360,000,000
Total tax-exempt assets	$360,000,000
Total discretionary tax-exempt	$360,000,000
Tax-exempt clients	48
Types of accounts managed	EG
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	1

Amervest Co. Inc. is an active fixed-income and short-term manager.

Its value fixed-income approach has a modest variability of duration around the benchmark.

Peter W. Cheung is chief investment officer; Lori E. Kilburn is client contact.

AMI Partners Inc.

26 Wellington St. E., Suite 900, Toronto, Ontario M5E 1S2; (416) 865-0731

Total assets managed	$8,492,000,000
Total discretionary	$8,492,000,000
Total tax-exempt	$6,098,000,000
Total discretionary tax-exempt	$6,098,000,000
For subsidiaries of U.S. firms	$1,358,000,000
Equity real estate assets	$47,000,000
Non-North American equities	$215,000,000
Equity indexed assets	$1,500,000,000
Tax-exempt clients	133
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	18
Size of research staff	2

AMI Partners Inc., a Canadian firm, is an active and passive domestic equity, active international equity, active fixed-income, balanced, real estate, short-term and venture capital manager.

Its equity approach focuses on the long term, using fundamental analysis to identify undervalued stocks with good growth potential. Portfolios are well diversified.

Fixed-income portfolios consist of a core portion of special-feature issues that perform well under various interest rate conditions. Incremental value is added by interest rate anticipation. Portfolios are high quality and very liquid.

Balanced portfolios provide diversification by using non-North American securities, real estate and venture capital.

Included in the assets above is Vengrowth Capital Funds, an AMI joint venture, which offers venture capital limited partnerships. It manages $70 million in tax-exempt assets, investing in the equity of well-managed, small to midsize North American private companies.

The asset mix Jan. 1 was 35% Canadian stocks, 7.5% U.S. stocks, 45% bonds, 7% cash, 3% equity real estate and 2.5% international.

It follows 125 stocks closely and 250, generally; 70% of research is generated internally.

Gary V. Kondrat is chief investment officer; Tania Muranko is client contact.

Amoskeag Bank

875 Elm St., P.O. Box 6060, Manchester, N.H. 03108; (603) 647-3600

Total assets managed	$499,000,000
Total discretionary assets	$410,000,000
Total tax-exempt assets	$150,000,000
Total discretionary tax-exempt	$150,000,000
401(k)/457 plan assets	$10,000,000
Tax-exempt clients	210
Types of accounts managed	CEF
Minimum separate account	$300,000
No. of portfolio managers	5

Amoskeag Bank is an active and passive equity and fixed-income, balanced, tactical asset allocation and short-term manager.

For equities, it is value-oriented, using growth and low p/e stocks with Graham & Dodd analysis. It uses interest rate anticipation for fixed income.

The asset mix Jan. 1 was 55% stocks, 30% bonds and 15% cash.

The bank follows 40 stocks closely and 200,

Denver Investment Advisors, Inc.

633 Seventeenth Street; Suite 1800
Post Office Box 17487
Denver, Colorado 80217

Dennis E. Larkin
Vice President
(303) 293-5588

Equity ■ Balanced ■ Fixed Portfolios

generally; all research is generated internally.

The parent is Amoskeag Bank Shares Inc.

Anthony R. Walker is chief investment officer; Curt G. Ehler is client contact.

AMR Investment Services

P.O. Box 619003, Dallas/Ft. Worth Airport, Texas 75261-9003; (817) 967-3509

Total assets managed	$3,159,000,000
Total discretionary	$3,159,000,000
Total tax-exempt assets	$796,000,000
Total discretionary tax-exempt	$796,000,000
GIC assets managed	$212,000,000
401(k)/457 assets managed	$291,000,000
Tax-exempt clients	22
Types of accounts managed	CF
Minimum separate account	$20,000,000
No. of portfolio managers	5

AMR Investment Services Inc. is an active equity, balanced and international manager through a manager-of-managers mutual fund approach. AMR is also an active limited-term income and short-term cash manager through separate account management or mutual funds.

In addition to assets listed above, $3,987 billion in discretionary tax-exempt assets are managed on the firm's behalf by external managers.

For equities, the firm follows a low p/e, low price-to-book value approach. Its fixed-income approach uses sector analysis, stressing income requirements and low volatility.

The asset mix Jan. 1 was 73% cash and 27% GICs.

AMR is a wholly owned subsidiary of AMR Corp., the parent company of American Airlines.

William F. Quinn, Michael W. Fields and Dennis M. O'Hara are chief investment officers; Richard N. Hoag and Bart Roberson are client contacts.

AmSouth Bank

P.O. Box 11426, Birmingham, Ala. 35202; (205) 326-5512

Total assets managed	$11,077,000,000
Total discretionary assets	$4,525,000,000
Total tax-exempt assets	$8,177,000,000
Total discretionary tax-exempt	$2,163,000,000
401(k)/457 plan assets	$216,000,000
Tax-exempt clients	815
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	19

AmSouth Bank is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is fundamental and value-oriented, buying and selling securities that are temporarily mispriced relative to long-term value.

Its primary fixed-income approach uses interest rate anticipation, capitalizing on broad, cyclical movements.

The asset mix Jan. 1 was 32% stocks, 61% bonds and 7% cash.

The bank follows 250 stocks closely and 900, generally; 30% of research is generated internally.

The parent is AmSouth Bancorp.

John H. Goff Jr. is chief investment officer; Jo-Ann D. Foster is client contact.

ANB Investment Management & Trust Co.

1 N. LaSalle St., Suite 600, Chicago, Ill. 60532; (312) 661-5586

Total assets managed	$13,385,000,000
Total discretionary	$13,385,000,000
Total tax-exempt assets	$12,257,000,000
Discretionary tax-exempt	$12,257,000,000
International equity assets	$450,000,000
Equity indexed assets	$8,517,000,000
Fixed-income indexed assets	$1,667,000,000
Mortgage-backed assets	$225,000,000
401(k)/457 assets managed	$500,000,000
Types of accounts managed	CEPG
No. of portfolio managers	13
Size of research staff	4

ANB Investment Management & Trust Co. is an active domestic equity, passive domestic and international equity, active and passive fixed-income, balanced, short-term and tactical asset allocation manager.

Its primary equity approach is passive, but a strategic active approach also is offered. Its primary fixed-income approach is passive. Active portfolios are built using a duration model. Stock index and fixed-income futures are used.

The asset mix Jan. 1 was 82% stocks, 13% bonds, 3% cash and 2% mortgage-backed securities.

All research is generated internally.

The parent is American National Bank, Chicago.

John Tilton is chief investment officer; Ken Sobolewski is client contact.

Anchor Capital Advisors Inc.

1 Post Office Square, Boston, Mass. 02109; (617) 423-9336

Total assets managed	$320,000,000
Total discretionary	$320,000,000
Total tax-exempt assets	$229,000,000
Total discretionary tax-exempt	$229,000,000
Tax-exempt clients	113
Types of accounts managed	CEFJ
Minimum separate account	$250,000
No. of portfolio managers	5

Anchor Capital Advisors Inc. is an active equity, active bond and balanced manager.

Its equity approach is creative, flexible and value oriented, focusing on low p/e stocks. Its fixed-income approach is active, based upon forecasts of interest rates and inflation.

William P. Rice is chief investment officer; Robert F. Croce is client contact.

Anhalt/O'Connell Inc.

345 S. Figueroa St., Suite 303, Los Angeles, Calif. 90071; (213) 622-0066

Total assets managed	$729,000,000
Total discretionary	$729,000,000
Total tax-exempt assets	$679,000,000
Total discretionary tax-exempt	$679,000,000
Tax-exempt clients	5
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	2

Anhalt/O'Connell Inc., an active fixed-income manager, uses fundamental data to identify interest rate trends and appropriate maturities. Put and call options on Treasury bond futures are used as a hedge. It uses Treasury securities exclusively.

The asset mix Jan. 1 was 100% bonds.

Michael F. O'Connell is chief investment officer; Ross B. McAdam is client contact.

Aon Advisors Inc.

6604 W. Broad St., Richmond, Va. 23230; (804) 281-6447

Total assets managed	$4,657,000,000

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Apartments. Over the last 13 years apartments have outperformed all other property types within the Russell-NCREIF and outperformed the aggregate index by 12.4 percent. Sociological and economic trends point to an even stronger performance in the '90s.

That's why The RREEF Funds, a leader in directing the investment of pension funds into real estate, continues to commit its resources to researching and acquiring select, high-quality apartment buildings.

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Apartments mean real results.

RREEF
The RREEF Funds
Real Estate. Real Results.

San Francisco: Stephen M. Steppe (415) 781-3300
Dallas: Webb Sowden, Jr. (214) 745-1701
Chicago: Donald A. King, Jr. (312) 266-9300
New York: Peter Steil (212) 688-3900

Total discretionary	$4,094,000,000
Total tax-exempt assets	$1,348,000,000
Total discretionary tax-exempt	$1,253,000,000
Equity real estate assets	$2,000,000
Mortgage assets	$281,000,000
Dedicated/immunized assets	$970,000,000
No. of portfolio managers	6

Aon Advisors Inc. is an active equity, active fixed-income, balanced and real estate manager.

Its primary equity approach is quantitative. Its primary fixed-income approach emphasizes anticipating interest rate trends and selecting issues with improving credit characteristics not yet reflected in their current market price. Options are used.

Its real estate approach seeks loans on significantly leased, income-producing property.

The asset mix Jan. 1 was 78% bonds and 22% mortgages.

The parent is Aon Corp.

Michael Conway is chief investment officer; J. Garnett Nelson is client contact.

APAM-Atlantic Portfolio Analytics & Management

201 E. Pine St., Suite 600, Orlando, Fla. 32801; (407) 843-7110

Total assets managed	$1,003,000,000
Total discretionary	$1,003,000,000
Total tax-exempt assets	$476,000,000
Total discretionary tax-exempt	$476,000,000
Mortgage-backed assets	$476,000,000
Tax-exempt clients	1
Types of accounts managed	G
Minimum separate account	$15,000,000
No.of portfolio managers	4
Size of research staff	8

APAM — Atlantic Portfolio Analytics & Management Inc. is a manager of mortgage-backed security derivative spread portfolios.

The firm's sole focus is quantitative analysis and research, operations, settlement and client reporting for mortgage-backed securities and derivative products.

The asset mix Jan. 1 was 100% mortgage-backed securities.

Ninety percent of the research is generated internally.

Jon M. Knight is chief investment officer; Nicholas R. Whitcraft is client contact.

Argus Investment Management

1165 Coast Village Road, Santa Barbara, Calif. 93108; (805) 969-4999

Total assets managed	$209,000,000
Total discretionary	$209,000,000
Total tax-exempt assets	$131,000,000
Total discretionary tax-exempt	$131,000,000
International equity assets	$6,000,000
Tax-exempt clients	69
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	4

Argus Investment Management is an active equity and balanced tactical asset allocation manager.

Equity selection is biased to value, using technical methods. Portfolio diversification is emphasized. In fixed income, it uses the highest quality instruments. Maturities are actively managed pursuant to in-house studies of money and credit conditions.

The asset mix Jan. 1 was 70% stocks, 23% bonds and 7% cash.

The firm follows 200 stocks closely and 1,000, generally; 80% of the research is generated internally.

Jon S. Bull and A.C. Moore are chief investment officers; Timothy R. Alward is client contact.

Argus Investors' Counsel

17 Battery Place, New York, N.Y. 10004; (212) 425-7500

Total assets managed	$944,000,000
Total discretionary	$890,000,000
Total tax-exempt assets	$903,000,000
Total discretionary tax-exempt	$850,000,000
Tax-exempt clients	20
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	20

Argus Investors' Counsel Inc., an active equity manager, takes a broadly diversified approach, specializing in mid- to large-cap stocks. It invests in one company in each of 40 to 60 industries. Approximate equal weightings of holdings are maintained by following a strict contra-market rebalancing process. For foundations or endowments, a high/yield/growth-of-income approach is used.

The asset mix Jan. 1 was 97% stocks, 1% bonds and 2% cash.

The firm follows 400 stocks closely and 800, generally; all research is generated internally.

The parent is Argus Research Group.

Herman I. Roseman is chief investment officer; Michael J. Bonner is client contact.

Ariel Capital Management

307 N. Michigan Ave., Suite 1020, Chicago, Ill. 60601; (312) 726-0140

Total assets managed	$1,230,000,000
Total discretionary	$1,000,000,000
Total tax-exempt assets	$800,000,000
Total discretionary tax-exempt	$800,000,000
Tax-exempt clients	48
Types of accounts managed	CEFGJ
Minimum separate account	$20,000,000
No. of portfolio managers	2
Size of research staff	4

Ariel Capital Management Inc., an active equity manager, searches for undervalued niche businesses with a p/e of less than 11 and potential to grow at 15% or more annually.

The asset mix Jan. 1 was 95% equities and 5% cash.

The firm follows 60 stocks closely; 75% of the research is generated internally.

John W. Rogers Jr. is chief investment officer; Darice M. Wright is client contact.

Ariston Capital Management

12301 N.E. 10th Place, Suite 250, Bellevue, Wash. 98004; (206) 454-1600

Total assets managed	$21,000,000
Total discretionary	$21,000,000
Total tax-exempt assets	$7,000,000
Total discretionary tax-exempt	$7,000,000
Tax-exempt clients	24
Types of accounts managed	CG
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	2

Ariston Capital Management Corp. is a convertible securities manager.

Its approach combines growth, emerging growth and low p/e stocks with sector rotation and long-term market forecasting. Undervalued convertibles are used as a low-risk equity alternative. In fixed-income, interest rate anticipation is used.

All assets were in convertible securities Jan. 1.

Richard B. Russell is chief investment officer and client contact.

Armstrong Shaw Associates

32 Threadneedle Lane, Stamford, Conn. 06902; (203) 356-0284

Total assets managed	$236,000,000
Total discretionary	$240,000,000
Total tax-exempt assets	$108,000,000
Total discretionary tax-exempt	$83,000,000
Tax-exempt clients	20
Types of accounts managed	CFJ
Minimum separate account	$3,000,000
No. of portfolio managers	2
Size of research staff	1

Armstrong Shaw Associates is an active and passive equity, passive bond and balanced manager.

It has a disciplined, absolute value approach to the equity market, investing in securities where a rigid cash flow or asset appraisal determines that a stock is selling at a substantial discount to intrinsic value.

Raymond J. Armstrong is chief investment officer and client contact.

Arnhold and S. Bleichroeder

45 Broadway, New York, N.Y. 10006; (212) 943-9200

Total assets managed	$1,200,000,000
Total discretionary	$1,200,000,000
Total tax-exempt assets	$550,000,000
Total discretionary tax-exempt	$550,000,000
International equity assets	$390,000,000
Tax-exempt clients	12
Types of accounts managed	CE
Minimum separate account	$10,000,000
No.of portfolio managers	5
Size of research staff	9

Arnhold and S. Bleichroeder is an active domestic and international equity manager.

Its value-oriented, low p/e equity approach uses highly concentrated (30-stock) portfolios in both domestic and international equities and seeks fundamental value by comparing absolute and relative p/e and price/cash flow ratios.

It uses options and stock index futures.

The asset mix Jan. 1 was 88% stocks and 12% cash.

Sixty percent of the research is generated internally.

H.H. Arnhold is chief investment officer; F.C. Reynolds is client contact.

Included in the numbers above are the assets of Verus Capital, an active equity manager with $130 million in tax-exempt assets. David Cohen is chief investment officer; Mr. Reynolds is client contact.

Aronson + Fogler

230 S. Broad St., 20th Floor, Philadelphia, Pa. 19102; (215) 546-7500

Total assets managed	$200,000,000
Total discretionary	$200,000,000
Total tax-exempt assets	$200,000,000
Total discretionary tax-exempt	$200,000,000
Tax-exempt clients	7
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	2

Aronson + Fogler is an active equity manager.

Its equity approach is value-oriented, quantitative and unemotional. The model-driven philosophy emphasizes classical security analysis and state-of-the-art trading techniques. Mixed-, large- and small-cap value strategies are available.

The asset mix Jan. 1 was 99% stocks and 1% cash.

The firm follows 1,500 stocks closely and 6,500, generally; all research is generated internally.

Theodore R. Aronson and H. Russell Fogler are chief investment officers; James S. Lobb is client contact.

The master trust/custody and global custody directory will be published Oct. 14.

25 largest insurers

Firm	$ mils.*
Prudential	92,380
Metropolitan Life	64,086
Aetna	45,196
Equitable Life	43,692
The New England	29,922
CIGNA	28,409
Pacific Mutual	26,079
John Hancock	24,165
Travelers	21,659
Principal Financial	21,508
New York Life	18,645
Transamerica	17,038
Primerica	15,783
USF&G	14,705
Massachusetts Mutual	14,531
Lincoln Nat'l	13,068
Kemper	9,807
Marsh/McLennan	8,031
Provident Nat'l	7,835
Great-West Life	7,547
MONY	7,524
Continental Assurance	6,486
Nationwide Life	6,469
Hartford Life	6,300
Mutual Benefit Life	6,105
Total	**556,570**

*Discretionary tax-exempt assets, including subsidiaries

ASB Capital Management

655 15th St. N.W., Suite 800, Washington, D.C. 20005; (202) 383-6300

See entry for SECURITY TRUST CO.

Ashland Management Inc.

26 Broadway, New York, N.Y. 10004; (212) 425-2803

Total assets managed	$916,000,000
Total discretionary	$916,000,000
Total tax-exempt assets	$778,000,000
Total discretionary tax-exempt	$778,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	77
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	5

Ashland Management Inc., an active equity and short-term manager, seeks quality growth stocks with low p/es. Graham & Dodd analysis is used.

The firm follows 200 stocks closely and 1,200, generally; 90% of the research is generated internally.

Charles C. Hickox is chief investment officer; Minot Amory is client contact.

Assurance-vie Desjardins

1 Complexe Desjardins, Montreal, Quebec H5B 1E2; (514) 285-7700

Total assets managed	$2,895,000,000
Total discretionary	$928,000,000
Total tax-exempt	$928,000,000
Total discretionary tax-exempt	$928,000,000
For subsidiaries of U.S.firms	$68,000,000
Mortgage assets	$93,000,000
Tax-exempt clients	14
Types of accounts managed	C
Minimum separate account	$2,500,000
No. of portfolio managers	5

Assurance-vie Desjardins Inc., a Canadian firm, is an active equity, active fixed-income and balanced manager.

Its equity approach is value oriented and uses sector rotation. Its fixed-income approach uses sector analysis and interest rate anticipation. Options are used.

The asset mix Jan. 1 was 36.2% Canadian stocks, 7.5% U.S. equities, 39% bonds, 7% cash, 0.1% equity real estate and 10.2% mortgages.

It follows 50 stocks closely and 30, generally.

The parent is Desjardins Group.

Diane Fleurent is chief investment officer and client contact.

Atalanta/Sosnoff Capital

101 Park Ave., Sixth Floor, New York, N.Y. 10178; (212) 867-5000

Total assets managed	$1,220,000,000
Total discretionary	$1,220,000,000
Total tax-exempt assets	$1,121,000,000
Total discretionary tax-exempt	$1,121,000,000
Tax-exempt clients	44
Types of accounts managed	CEFGJ
No. of portfolio managers	6

Atalanta/Sosnoff Capital Corp. is an active equity and balanced manager.

Its primary equity approach emphasizes earnings momentum, involving thematics and stock selection. The firm seeks to identify change and enhances the process by identifying "event-driven" companies with changes in product profile, management philosophy and earnings power.

Its fixed-income approach uses interest rate anticipation and sector analysis. The firm tends to avoid concentration in long maturities.

Martin T. Sosnoff is chief investment officer; May Mahr is client contact.

Atlanta Capital Management

2 Midtown Plaza, 1360 Peachtree St., Atlanta, Ga. 30309; (404) 876-9411

Total assets managed	$1,701,000,000
Total discretionary	$1,406,000,000
Total tax-exempt assets	$1,382,000,000
Total discretionary tax-exempt	$1,382,000,000
Dedicated/immunized assets	$27,000,000
Mortgage-backed assets	$75,000,000
Tax-exempt clients	40
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	1

Atlanta Capital Management Co. is an active equity, active and passive fixed-income and balanced manager.

In equities, an optimizer is used to build portfolios from a universe of stocks rated A or better by S&P with above average growth characteristics; theme strategies further concentrate holdings in companies with superior expected growth.

Its fixed-income approach uses interest rate anticipation. A proprietary optimization model is used to determine the optimal maturity schedule. Holdings are concentrated in intermediate bonds with minimum quality of A or better.

The asset mix Jan. 1 was 80% stocks, 14% bonds, 3% cash and 3% mortgage-backed securities.

The firm follows 150 stocks closely and 650, generally; 50% of the research is generated internally.

The parent is TSB USA.

Frederick L. Mutler is chief investment officer; Walter F. Reames is client contact.

Austin & Calvert Inc.

112 E. Pecan, Suite 2800, San Antonio, Texas 78205; (512) 224-8241

Total assets managed	$515,000,000
Total discretionary	$502,000,000
Total tax-exempt assets	$239,000,000
Total discretionary tax-exempt	$226,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	44
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	1

Austin & Calvert Inc. is an active equity and fixed-income and balanced manager.

In equities, it invests in companies and industries undergoing significant change where there is value measured by both relative and absolute equity disciplines.

Its fixed-income approach emphasizes interest rate anticipation and is event driven, which leads to maturity/duration shifts and/or sector rotation.

The firm follows 100 stocks closely and 700, generally; 70% of the research is generated internally.

Harry M. Flavin is chief investment officer; Edward H. Austin Jr. is client contact.

Avatar Associates

900 Third Ave., New York, N.Y. 10022; (212) 753-7710

Total assets managed	$2,100,000,000
Total discretionary	$2,100,000,000
Total tax-exempt assets	$1,800,000,000
Total discretionary tax-exempt	$1,800,000,000
401(k)/457 assets managed	$300,000,000
Tax-exempt clients	102
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	5

Avatar Associates is an active equity, balanced, short-term and tactical asset allocation manager.

For TAA accounts implemented with active stock selection (vs. index funds), the firm rotates between growth and value characteristics. Larger capitalization issues are used.

For TAA accounts implemented with active bond selection (vs. index funds), maturity/duration is actively altered based on proprietary liquidity research. U.S. government/agency issues are emphasized. Stock index and fixed-income futures are used.

The asset mix Jan. 1 was 65% stocks, 15% bonds and 20% cash.

The firm follows 150 stocks closely and 6,000, generally; 80% of the research is generated internally.

Edward S. Babbitt Jr. is chief investment officer; Bruce L. Poliquin is client contact.

Axe Core Investors Inc.

400 Benedict Ave., Tarrytown, N.Y. 10591; (914) 333-5222

Total assets managed	$879,000,000
Total discretionary	$879,000,000
Total tax-exempt assets	$848,000,000
Total discretionary tax-exempt	$848,000,000

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

International equity assets	$310,000,000
Equity indexed assets	$848,000,000
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	3

Axe Core Investors Inc., a passive domestic and international equity manager, uses index fund technology to customize portfolios.

All assets were in stocks Jan. 1.

The parent is Axe-Houghton/USF&G Corp.

Seth M. Lynn Jr. is chief investment officer; Brian Harris is client contact.

Axe-Houghton Ltd.

35 Dover St., London W1X 3RA, U.K.; 01-499-4838

See entry for AXE-HOUGHTON MANAGEMENT.

Axe-Houghton Management

400 Benedict Ave., Tarrytown, N.Y. 10591; (914) 631-8131

Total assets managed	$8,166,000,000
Total discretionary	$8,166,000,000
Total tax-exempt assets	$375,000,000
Total discretionary tax-exempt	$375,000,000
401(k)/457 assets managed	$43,000,000
Tax-exempt clients	14
Types of accounts managed	CFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	23

Axe-Houghton Management Inc. is an active equity and fixed-income, balanced and short-term manager. Active international/global bond management is offered through Axe-Houghton Ltd.

Its active equity approach emphasizes growth and emerging growth stocks. Balanced portfolios are allocated between the growth equity approach and fixed-income investments. Options and stock index futures are used.

Its primary fixed-income approach is one of duration management based on a multiscenario economic outlook and management of risk associated with quality spreads, sector weighting and issue selection.

The asset mix Jan. 1 was 25% stocks, 67% bonds and 8% cash.

The firm follows 300 stocks closely and 600, generally; 80% of the research is generated internally.

The parent is USF&G Corp.

John L. Schroeder is chief investment officer; Stephen J. Darby Jr. is client contact.

Assets of Axe-Houghton Ltd. are included above. Axe-Houghton is an international fixed-income manager based in London. Henry H. Livingston III is chief investment officer.

J.H. Ayres & Co. Inc.

2016 Condor St., Colorado Springs, Colo. 80909; (719) 635-1414

Total assets managed	$2,500,000,000
Total discretionary	$2,500,000,000
Total tax-exempt assets	$2,500,000,000
Total discretionary tax-exempt	$2,500,000,000
Tax-exempt clients	189
Types of accounts managed	C
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	2

J.H. Ayres & Co. Inc. is a tactical asset allocation and short-term manager.

The firm monitors changes in monetary policy and shifts between being invested 100% in equity mutual funds and 100% in money market mutual funds.

All research is generated internally.

James H. Ayres is chief investment officer and client contact.

B

Back Bay Advisors

399 Boylston St., Boston, Mass. 02116; (617) 578-1500

Total assets managed	$5,944,000,000
Total discretionary	$5,944,000,000
Total tax-exempt assets	$968,000,000
Total discretionary tax-exempt	$968,000,000
Equity indexed assets	$94,000,000
Mortgage-backed assets	$169,000,000
Tax-exempt clients	400
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	4

Back Bay Advisors is a passive equity, active domestic and international bond, and short-term manager.

In enhanced core portfolios, the fixed-income approach makes duration, sector and individual security adjustments within pre-set parameters around a benchmark index, based on interest rate anticipation, sector analysis and credit research.

The asset mix Jan. 1 was 27% stocks, 21.5% bonds, 10% cash, 17.5% mortgage-backed securities and 24% Treasuries.

The parent is The New England.

Charles T. Wallis is chief investment officer; Anhwine Jefferson III is client contact.

P&I examines who owns the largest non-U.S. corporations in the July 22 issue.

Julius Baer Investment Management Inc.

330 Madison Ave., New York, N.Y. 10017; (212) 297-3850

Total assets managed	$820,000,000
Total discretionary	$820,000,000
Total tax-exempt assets	$712,000,000
Total discretionary tax-exempt	$712,000,000
International equity assets	$26,000,000
International fixed-income	$686,000,000
401(k)/457 assets managed	$566,000,000
Tax-exempt clients	13
Types of accounts managed	CFG
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	36

Julius Baer Investment Management Inc. is an active international/global equity and fixed-income and active European equity manager.

Its equity approach uses growth stocks and sector rotation. Country allocations are based on expected total return, and stock selection emphasizes large, stable growth companies and industry trends.

Its fixed-income approach uses interest rate anticipation, sector analysis and currency mix. Currency weightings are based on total return forecasts, with or without hedging. Bond selection emphasizes government and high-quality issues with medium maturities.

The asset mix Jan. 1 was 4% stocks and 96% bonds.

Sixty percent of research is generated internally.

Peter J. Widmer is chief investment officer; Jay A. Dimberger is client contact.

Baillie Gifford Overseas Ltd.

7 Glenfinlas St., Edinburgh, U.K. EH3 6YY; 031-225-2581

Total assets managed	$6,350,000,000
Total discretionary	$6,350,000,000
Total tax-exempt assets	$29,000,000
Total discretionary tax-exempt	$29,000,000
International equity assets	$28,000,000
International cash assets	$1,000,000
Tax-exempt clients	2
Types of accounts managed	CF
Minimum separate account	$10,000,000
No. of portfolio managers	25
Size of research staff	7

Baillie Gifford Overseas Ltd. is an active international/global equity manager.

Its primary equity approach is based on fundamental research of both companies and countries. It seeks well-managed companies with good growth potential. It also runs a variety of regional funds (Japan, Europe, U.K., Far East). Currency options are used.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 1,000 stocks closely and more than 2,000, generally; 40% of the research is generated internally.

The parent is Baillie Gifford & Co.

Robin Menzies is chief investment officer; Ross Lidstone is client contact.

Robert W. Baird & Co. Inc. Investment Management Services

777 E. Wisconsin Ave., Milwaukee, Wis. 53202; (414) 765-3892

Total assets managed	$600,000,000
Total discretionary	$600,000,000
Total tax-exempt assets	$293,000,000
Total discretionary tax-exempt	$293,000,000
401(k)/457 assets managed	$33,000,000
Tax-exempt clients	78
Types of accounts managed	CEF
Minimum separate account	$3,000,000
No. of portfolio managers	6
Size of research staff	2

Robert W. Baird & Co. Inc. Investment Management Services is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach focues on quality growth stocks. Its fixed-income approach is dependent on sector analysis for investment selection. Interest rate anticipation is used.

The asset mix Jan. 1 was 42% stocks, 44% bonds, 13% cash and 1% GICs.

The firm follows 75 stocks closely and 200, generally; 10% of the research is generated internally.

Northwestern Mutual Life Insurance owns a majority interest.

Robinson Bosworth III is chief investment officer; J. Camp Van Dyke is client contact.

Balch, Hardy, Scheinman & Winston Inc.

501 Fifth Ave., 15th Floor, New York, N.Y. 10017; (212) 661-6290

Total assets managed	$124,000,000
Total discretionary	$124,000,000
Total tax-exempt assets	$124,000,000
Total discretionary tax-exempt	$124,000,000
Tax-exempt clients	12
Types of accounts managed	CEFG
Minimum separate account	$20,000,000
No. of portfolio managers	5
Size of research staff	2

Balch, Hardy, Scheinman & Winston Inc. is an active equity and options manager.

Its option overwriting strategy, which accounts for $2 billion under management, writes options on another manager's equity holdings. Its quantitative equity strategy, WealthMax (for which it actively manages $124 million) uses a multifactor risk model to build high return, low-risk portfolios.

The asset mix Jan. 1 was 99% stocks and 1% cash.

The firm follows 600 stocks closely and 600, generally; 75% of research is generated internally.

William F. Balch is chief investment officer; Steve Hardy is client contact.

The Balcor Co

4849 Golf Road, Skokie, Ill. 60077; (708) 677-2900

Total assets managed	$4,606,000,000
Total discretionary	$1,791,000,000
Total tax-exempt assets	$1,791,000,000
Total discretionary tax-exempt	$1,791,000,000
Equity real estate assets	$682,000,000
Mortgage assets	$1,109,000,000
Tax-exempt clients	79
Types of accounts managed	CEG
Minimum separate account	$25,000,000
No. of portfolio managers	30
Size of research staff	15

The Balcor Co. is a real estate investment management company with businesses based in development, finance and management. The firm is a long-term investor, focusing on effective property and portfolio management to create and sustain value.

The asset mix Jan. 1 was 38% equity real estate and 62% mortgages.

The parent is Shearson Lehman Brothers Holdings Inc./American Express.

Tom Meador is chief investment officer; John K. Powell Jr. is client contact.

BancOklahoma Trust Co.

P.O. Box 2300, Tulsa, Okla. 74192; (918) 588-6465

Total assets managed	$2,701,000,000
Total discretionary assets	$1,996,000,000
Total tax-exempt assets	$2,165,000,000
Total discretionary tax-exempt	$1,509,000,000
Mortgage-backed assets	$113,000,000
401(k)/457 plan assets	$900,000,000
Tax-exempt clients	880
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	2

BancOklahoma Trust Co. is an active equity, active bond, balanced, real estate and short-term manager.

Its equity approach is a growth and income, top-down method determining specific weightings in each sector of the market. Fundamental research is completed on each company.

Its primary fixed-income approach is top-down, with maturity structure adjusted based on interest rate anticipation. Governmental, agency and mortgage-backed securities are emphasized.

The asset mix Jan. 1 was 42.4% stocks, 29.9% bonds, 20.2% cash and 7.5% mortgage-backed securities.

The bank follows 40 stocks closely and 350, generally; 10% of research is generated internally.

The parent is Bank of Oklahoma.

Rudy M. Thomas is chief investment officer; Brian K. Hayes is client contact.

Bane Barham & Holloway Assets Management Inc.

811 S.W. Front Ave., Suite 410, Portland, Ore. 97204; (503) 222-1993

Total assets managed	$60,000,000
Total discretionary	$60,000,000
Total tax-exempt assets	$30,000,000
Total discretionary tax-exempt	$30,000,000
Tax-exempt clients	200
Types of accounts managed	CF
Minimum separate account	$100,000
No. of portfolio managers	4
Size of research staff	4

Bane Barham & Holloway Assets Management Inc. is an active equity, active bond and balanced manager.

Its equity approach is value oriented, targeting characteristics such as a strong balance sheet, established profitability, discount from intrinsic value, low relative p/e and unrecognized potential. Its fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 75% stocks, 20% bonds and 5% cash.

The firm follows 30 stocks closely; all research is generated internally.

William Bane is chief investment officer; Mark Holloway is client contact.

Bank IV

P.O. Box 4, Wichita, Kan. 67201-0004; (316) 261-4555

Total assets managed	$1,374,000,000
Total discretionary	$1,358,000,000
Total tax-exempt assets	$326,000,000
Total discretionary tax-exempt	$326,000,000
Tax-exempt clients	504
Types of accounts managed	CEFGJ
No. of portfolio managers	11
Size of research staff	3

Bank IV is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes stock selection based on multiquantitative methods and fundamental analysis, using bottom-up stock selection with a top-down economic process for cash allocation decisions. In fixed income, it uses a variety of issues to outperform the targeted benchmark by controlled adjustments to portfolio duration and sector.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

The bank follows 300 stocks closely and 500, generally; 20% of research is generated internally.

The parent is Fourth Financial Corp.

John S. Maurer Jr. is chief investment officer; Roger A. Ramseyer is client contact.

Bank of Ireland Asset Management Ltd.

3 First National Plaza, Suite 1400, Chicago, Ill. 60602; (312) 419-8224

Total assets managed	$118,000,000
Total discretionary	$118,000,000
Total tax-exempt assets	$72,000,000
Total discretionary tax-exempt	$72,000,000
International equity assets	$31,000,000
Tax-exempt clients	15
Types of accounts managed	CG
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	6

Bank of Ireland Asset Management Ltd. is an active international/global equity and short-term manager.

It uses a value-oriented, concentrated and primarily bottom-up approach. Economic and market analysis identifies themes and specifies selection criteria; country allocations and currency considerations also are made.

The parent is Bank of Ireland.

Christopher Reilly is chief investment officer; Gerald Colleary is client contact.

Dedicated/immunized assets	$100,000,000
Mortgage-backed assets	$800,000,000
401(k)/457 plan assets	$700,000,000
Tax-exempt clients	2,000
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	20
Size of research staff	7

Bank One is an active and passive equity and fixed-income, balanced, active international equity and fixed-income, short-term and dedicated/immunized manager.

Its equity approach is traditional, defensive- and value-oriented. Portfolios are fully invested throughout the business cycle. The bank focuses on companies with positive earnings momentum whose current p/e and p/b ratios are below the market.

Its fixed-income approach is to actively manage portfolios in order to achieve, with minimal risk, a total rate of return in excess of the Shearson Lehman Government/Corporate Bond Index over a complete market cycle.

The asset mix Jan. 1 was 16% stocks, 56% bonds, 8% cash and 18% mortgage-backed securities.

The bank follows between 75 and 100 stocks closely; 80% of research is generated internally.

The parent is Banc One Corp.

Leif E. Nulser is chief investment officer; Phillip E. Chambers is client contact.

Firm assigning assets to other managers

Discretionary tax-exempt assets

Firm	External*	Internal	Total
Common Fund	11,682	0	11,682
Prudential Diversified	9,948	1,503	11,451
Frank Russell Trust	9,600	0	9,600
Vanguard Group	6,186	6,147	12,333
Strategic Investment	4,640	0	4,640
AMR Investment Services	3,987	796	4,783
Collins Associates	2,250	0	2,250
MONY	1,968	7,524	9,492
RCB Int'l	1,026	0	1,026
Lincoln Nat'l Investment	901	10,884	11,785
Hartford Life	800	6,300	7,100
Nationwide Life Insurance	767	6,469	7,236
Brinson Partners	762	13,222	13,984
Pacific Financial Asset	704	224	928
Trust Fund Advisors	587	0	587
Pension Portfolio Advisors	406	0	406
Travelers	210	21,434	21,644
Sears Investment	193	4,987	5,180
Connecticut Mutual	154	2,961	3,115
State Mutual	152	4,282	4,434
Mutual of America	119	5,274	5,393
Progress Investment	99	0	99
AFL-CIO Housing/Building	90	364	454
Hawthorne Associates	74	595	669
Strategic Commodity Systems	40	0	40
Wilmington Trust	37	1,137	1,174
Reiser-Builder/Russell	33	6	39
Global Asset	12	83	95
ICH Capital	10	930	940
Shinnecock Partners	5	0	5
Total	**57,442**	**95,122**	**152,564**

*Assets assigned to other managers

The Bank of New York

1 Wall St., New York, N.Y. 10286; (212) 635-6920

Total assets managed	$26,135,000,000
Total discretionary assets	$26,135,000,000
Total tax-exempt assets	$12,300,000,000
Discretionary tax-exempt	$12,300,000,000
Equity indexed assets	$243,000,000
Fixed-income indexed assets	$90,000,000
Dedicated/immunized assets	$2,000,000,000
Tax-exempt clients	259
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	18
Size of research staff	11

The Bank of New York is an active and passive equity, active and passive fixed-income, active and passive international equity, balanced and short-term manager.

Its equity approach has a long-term value and growth orientation. Its active fixed-income approach takes a long-term value orientation, focusing on real yields and anticipation of change. Interest rate anticipation and sector analysis also are used.

The asset mix Jan. 1 was 11% stocks, 67.9% bonds and 21.1% cash.

The bank follows between 20 and 50 stocks closely and 35, generally; 75% of research is generated internally.

The parent is The Bank of New York Co. Inc.

Charles L. Booth is chief investment officer; Douglas D. Brown is client contact.

Bank One

101 Monument Circle, Indianapolis, Ind. 46277; (317) 321-8151

Total assets managed	$10,000,000,000
Total discretionary assets	$6,108,000,000
Total tax-exempt assets	$5,700,000,000
Total discretionary tax-exempt	$4,500,000,000

Bank South N.A.

55 Marietta St., Atlanta, Ga. 30302; (404) 521-7022

Total assets managed	$900,000,000
Total discretionary assets	$900,000,000
Total tax-exempt assets	$252,000,000
Total discretionary tax-exempt	$252,000,000
401(k)/457 plan assets	$25,000,000
Tax-exempt clients	86
Types of accounts managed	CEFGJ
No. of portfolio managers	7

Bank South N.A. is an active equity, active fixed-income, balanced and short-term manager.

For equities, it uses a value-driven, top-down approach that looks for solid, well-run companies with good cash flow, attractive earnings and strong balance sheets. Its fixed-income approach uses a top-down approach and limits maturities to a three- to 10-year range. Assets must have a minimum single-A credit rating.

The asset mix Jan. 1 was 40% stocks, 45% bonds and 15% cash.

The bank follows 50 stocks closely and 150, generally; 30% of research is generated internally.

The parent is Bank South Corp.

Phil Larkins is chief investment officer; Michael J. Boudens is client contact.

Bank of Tokyo Trust Co.

100 Broadway, New York, N.Y. 10005; (212) 766-3400

Total assets managed	$355,000,000
Total discretionary assets	$355,000,000
Total tax-exempt assets	$355,000,000
Total discretionary tax-exempt	$355,000,000
Tax-exempt clients	121
No. of portfolio managers	4
Size of research staff	2

Bank of Tokyo Trust Co. is an active equity, active bond, balanced and short-term manager.

Its equity approach is [illegible] combining market timing and sector rotation with fundamental analysis to participate in short- and long-term market cycles. Its fixed-income approach is based on interest rate anticipation and yield-spread analysis. It uses options and financial futures.

The bank follows 200 stocks closely and 4,000, generally.

The parent is Bank of Tokyo Ltd.

Charles E. Ryan is chief investment officer; Cynthia K. Ormsby is client contact.

Bank of the West Trust & Financial Services

P.O. Box 1121, San Jose, Calif. 95108; (408) 998-6857

Total assets managed	$156,000,000
Total discretionary assets	$156,000,000
Total tax-exempt assets	$48,000,000
Total discretionary tax-exempt	$48,000,000
401(k)/457 plan assets	$40,000,000
Tax-exempt clients	20
Types of accounts managed	CFG
Minimum separate account	$100,000
No. of portfolio managers	1

Bank of the West Trust & Financial Services is an active equity, active fixed-income, balanced and short-term manager.

Stocks selected have strong and growing cash flow, strong industry position, excellent balance sheets and reasonable valuation. In fixed-income, it uses interest rate anticipation.

The asset mix Jan. 1 was 30% stocks, 65% bonds and 5% cash.

The bank follows 30 stocks closely and 45, generally.

The parent is Banque Nationale de Paris.

Joseph W. Hefner is chief investment officer; Donald L. Draper is client contact.

Bankers Trust Co.

665 Locust, Des Moines, Iowa 50309; (515) 245-2497

Total assets managed	$825,000,000
Total discretionary assets	$150,000,000
Total tax-exempt assets	$60,000,000
Total discretionary tax-exempt	$45,000,000
Equity real estate assets	$1,000,000
International equity assets	$2,000,000
401(k)/457 plan assets	$20,000,000
Tax-exempt clients	50
Types of accounts managed	CEFJ
Minimum separate account	$300,000

Bankers Trust Co. is an active domestic and international equity, passive fixed-income and real estate manager.

Its equity approach focuses on low p/e stocks, emphasizing historical relative and dividend yields of high-quality companies. The fixed-income approach uses laddering of one- to seven-year maturities.

Doug Herold is chief investment officer and client contact.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017; (212) 454-2262

Total assets managed	$120,806,000,000
Total discretionary assets	$113,906,000,000
Total tax-exempt assets	$85,107,000,000
Discretionary tax-exempt	$85,107,000,000
International equity assets	$1,690,000,000
International fixed-income	$118,000,000
Equity indexed assets	$36,576,000,000
Fixed-income indexed assets	$3,461,000,000
Dedicated/immunized assets	$4,516,000,000
Mortgage-backed assets	$677,000,000
401(k)/457 plan assets	$10,001,000,000
Tax-exempt clients	227
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	33
Size of research staff	19

Bankers Trust Co. is an active and passive domestic/international/global equity and fixed-income, balanced, short-term, GIC, currency and options overwriting manager.

Its equity approaches use growth and emerging growth stocks, market timing/tactical asset allocation, quantitative and value (low p/e) techniques.

Its active fixed-income approach uses sector and issue selection.

The firm runs options overwriting, currency hedging and liquidity premium strategies on $1.47 billion; it manages the underlying assets of all but $130 million of that amount. Stock index and fixed-income futures also are used.

The asset mix Jan. 1 was 47% stocks, 19% bonds, 27% cash, 1% mortgage-backed securities and 6% GICs.

The bank follows 45 to 50 stocks closely and 300, generally; 85% of research is generated internally.

The parent is BankersTrust New York Corp.

H. Kent Atkins is chief investment officer; Michael E. Fisher is client contact.

Barclays McConnell Ltd.

P.O. Box 25, Suite 2600, Royal Bank Plaza, North Tower, Toronto, Ontario M5J 2J1; (416) 366-5871

Total assets managed	$2,519,000,000
Total discretionary	$2,519,000,000
Total tax-exempt	$2,088,000,000
Total discretionary tax-exempt	$2,088,000,000
For subsidiaries of U.S. firms	$481,000,000
Non-North American equities	$62,000,000
Non-North American cash	$29,000,000
Mortgage-backed assets	$82,000,000
Tax-exempt clients	120
U.S. subsidiaries	20
Types of accounts managed	CEFGU

Minimum separate account	$8,600,000
No. of portfolio managers	5
Size of research staff	4

Barclays McConnell Ltd., a Canadian firm, is an active domestic and international equity, active fixed-income, balanced and short-term manager.

In equities, industry group selection is of primary importance. The firm uses growth and emerging growth stocks and Graham & Dodd analysis.

In fixed income, the firm operates a three-part strategy comprising a core component, a smaller interest rate anticipation component and a trading component that uses sector analysis and spread trading opportunities.

The asset mix Jan. 1 was 33% Canadian stocks, 3% U.S. stocks, 46.5% bonds, 10.5% cash and 7% non-North American stocks.

It follows 45 stocks closely and 125, generally; 25% of research is generated internally.

The parent is Barclays Bank.

E.J. McConnell is chief investment officer; Barbara Bucys is client contact.

Baring America Asset Management Co. Inc.

150 Federal St., Boston, Mass. 02110; (617) 951-0052

Total assets managed	$1,224,000,000
Total discretionary	$1,224,000,000
Total tax-exempt assets	$1,012,000,000
Total discretionary tax-exempt	$1,012,000,000
Tax-exempt clients	23
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	12
Size of research staff	3

Baring America Asset Management Co. Inc. is an active equity, active fixed-income and balanced manager.

Its equity strategy is a disciplined approach to growth stock management with emphasis on sector diversification and relative earnings growth at the proper valuation. It offers two equity products: growth and quantitative. Its fixed-income approach uses sector rotation and issue selection to add value, while interest rate risk is controlled within narrow bands. Investment-grade, controlled sector mix and high-yield bond management are offered.

The asset mix Jan. 1 was 40.1% stocks, 50.9% bonds and 9% cash.

The firm follows 200 closely and 1,500 generally; 90% of the research is generated internally.

The parent is Barings PLC.

John F. McNamara is chief investment officer; Shaun R. Levesque and James P. Macmillan are client contacts.

Baring International Investment Ltd.

155 Bishopsgate, London, U.K. EC2M 3XY; 71-628-6000

Total assets managed	$4,425,000,000
Total discretionary	$4,425,000,000
Total tax-exempt assets	$3,889,000,000
Total discretionary tax-exempt	$3,889,000,000
International equity assets	$2,118,000,000
International fixed-income	$1,643,000,000
International cash assets	$128,000,000
Tax-exempt clients	34
Types of accounts managed	CEFG
Minimum separate account	$25,000,000
No. of portfolio managers	15

Baring International Investment Ltd. is an active international equity and fixed-income manager.

Its primary equity approach uses teams of regional specialists to seek growth potential given earnings strength, valuation levels and liquidity. EAFE, regional, country-specific and special mandates offered. Its fixed-income approach focuses on country/currency decisions. Forwards are used for hedging and cross hedging. Global, non-dollar and fully hedged mandates are available. Stock index futures are used.

The asset mix Jan. 1 was 55% stocks, 42% bonds and 3% cash.

The firm follows 250 stocks closely and 1,000, generally; 70% of research is generated internally.

The parent is Baring Asset Management.

Peter S. Hartley is chief investment officer; Michael E. Palone is client contact.

Weaver C. Barksdale & Associates

30 Burton Hills Blvd., Suite 550, Nashville, Tenn. 37215; (615) 665-1085

Total assets managed	$734,000,000
Total discretionary	$734,000,000
Total tax-exempt assets	$734,000,000
Total discretionary tax-exempt	$734,000,000
Mortgage assets	$219,000,000
Mortgage-backed assets	$55,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	19
Types of accounts managed	CEJ
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	1

Weaver C. Barksdale & Associates is an active and passive fixed-income and cash manager.

Its fixed-income approach uses yield enhancement, sector/security valuation analysis and minor duration adjustment. Its fixed-income products are: short duration, intermediate, full spectrum and GIC portfolio management.

The asset mix Jan. 1 was 43% bonds, 20% cash, 30% mortgages and 7% mortgage-backed securities.

Weaver C. Barksdale is chief investment officer; John E. McDowell is client contact.

Barnett Banks Trust Co. N.A.

P.O. Box 40200, Jacksonville, Fla. 32203; (904) 464-2343

Total assets managed	$4,816,000,000
Total discretionary assets	$4,816,000,000
Total tax-exempt assets	$1,401,000,000
Total discretionary tax-exempt	$1,401,000,000
401(k)/457 plan assets	$120,000,000
Tax-exempt clients	250
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	5

Barnett Banks Trust Co. N.A. is an active equity, active bond, balanced and short-term manager.

Its equity approach is growth at a reasonable price, using a blend of relative value and demonstrated growth. A quantitative discipline is the anchor in the process; fundamental analysis and due diligence as well as risk control are also applied.

Its fixed-income approach is interest rate anticipation, based on an internally developed economic forecast. While relative value among sectors is sought, emphasis is always on quality.

The asset mix Jan. 1 was 46% stocks, 43% bonds and 11% cash.

The bank follows 200 stocks closely and 1,500, generally; 90% of research is generated internally.

The parent is Barnett Banks Inc.

John L. Allen is chief investment officer; Robert L. Bartkowiak is client contact.

Baron Capital Management

450 Park Ave., New York, N.Y. 10022; (212) 759-7700

Total assets managed	$73,000,000
Total discretionary	$73,000,000
Total tax-exempt assets	$16,000,000
Total discretionary tax-exempt	$16,000,000
Tax-exempt clients	11
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	4

Baron Capital Management, an active equity manager, invests in small-cap, special situations. It selects unique, lesser-known companies with limited institutional following, and misperceived or unrecognized earning power and/or asset value.

The asset mix Jan. 1 was 75% stocks and 25% cash.

The firm follows 100 stocks closely and 250, generally; 95% of the research is generated internally.

The parent is Baron Capital Inc.

Ronald Baron is chief investment officer; Daniel E. Freelund, (203) 254-1215, is client contact.

Barrow, Hanley, Mewhinney & Strauss Inc.

200 Crescent Court, 19th Floor, Dallas, Texas 75115; (214) 871-5300

Total assets managed	$8,415,000,000
Total discretionary	$8,415,000,000
Total tax-exempt assets	$8,415,000,000
Total discretionary tax-exempt	$8,415,000,000
Dedicated/immunized assets	$363,000,000
Tax-exempt clients	79
Types of accounts managed	CEFGJ
Minimum separate equity account	$50,000,000
Minimum separate bond account	$20,000,000
No. of portfolio managers	8

Barrow, Hanley, Mewhinney & Strauss Inc. is an active equity, active bond, balanced and dedicated/immunized manager.

Its equity approach emphasizes low p/e, high dividend yield and low price/book ratios. Fixed-income portfolios reflect a high yield to maturity, a high current yield, high quality and a conservative maturity structure. Assets are concentrated in undervalued sectors.

The asset mix Jan. 1 was 81% stocks, 14% bonds and 5% cash.

The firm follows 250 stocks closely and 800, generally; 50% of the research is generated internally.

The parent is United Asset Management Corp.

Peter F. Bridge is client contact.

Batterymarch: AgriVest

500 Winding Brook Drive, Glastonbury, Conn. 06033; (203) 659-3711

Total assets managed	$257,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$100,000,000
Total discretionary tax-exempt	$100,000,000
Equity real estate assets	$100,000,000
Tax-exempt clients	2
Types of accounts managed	C
Minimum separate account	$25,000,000
No. of portfolio managers	3

Batterymarch: AgriVest, a real estate manager, invests in prime income-producing agricultural property diversified geographically and by crop.

All assets as of Jan. 1 were invested in equity real estate.

The firm is affiliated with Batterymarch Financial Management.

George E. Schwab is chief investment officer; James B. McCandless is client contact.

Batterymarch Financial Management

600 Atlantic Ave., Boston, Mass. 02210; (617) 973-9300

Total assets managed	$5,940,000,000
Total discretionary	$5,940,000,000
Total tax-exempt assets	$3,475,000,000
Total discretionary tax-exempt	$3,475,000,000
International equity assets	$1,566,000,000
Tax-exempt clients	26
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	10

Batterymarch Financial Management is an active domestic and international equity and emerging markets manager.

As a value manager, the firm believes the highest probability of success lies in having an independent view and in developing insights and valuation techniques to implement that view.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 6,000 stocks closely and generally; 90% of research is generated internally.

Dean LeBaron is chief investment officer; James Pannell is client contact.

Batterymarch: Canada Inc.

49 Wellington St. E., Toronto, Ontario M5E 1C9; (416) 865-9333

Total assets managed	$254,000,000
Total discretionary	$254,000,000
Total tax-exempt	$254,000,000
Total discretionary tax-exempt	$254,000,000
For subsidiaries of U.S. firms	$76,000,000
Non-North American equities	$27,000,000
Tax-exempt clients	17
U.S. subsidiaries	5
Types of accounts managed	CG
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	2

Batterymarch: Canada Inc., a Canadian firm, is an active domestic and international/global equity, active domestic bond and balanced account manager.

Its equity approach is conservative, value driven and non-consensus. In fixed income, it minimizes interest rate risk with durations targeted to a benchmark or matched to liabilities.

The asset mix Jan. 1 was 88.1% Canadian stocks, 0.4% U.S. stocks, 3.7% bonds and 7.8% international equities.

All research is generated internally.

Tania Zoulkin is chief investment officer and client contact.

Baxter Capital Management

115 W. Washington St., Indianapolis, Ind. 46204; (317) 635-7119

Total assets managed	$650,000,000
Total discretionary	$214,000,000
Total tax-exempt assets	$296,000,000
Total discretionary tax-exempt	$214,000,000
Mortgage-backed assets	$182,000,000
Tax-exempt clients	2
Types of accounts managed	G
Minimum separate account	$1,000,000
No. of portfolio managers	2

Baxter Capital Management is an active fixed-income and short-term manager.

Its investment approach emphasizes high-quality mortgage-backed and other asset-backed securities. Portfolio duration is varied by using interest rate anticipation based upon business cycle analysis.

The asset mix Jan. 1 was 11% bonds, 4% cash and 85% mortgage-backed securities.

Gary Baxter is chief investment officer; David Buren is client contact.

BEA Associates

153 E. 53rd St., New York, N.Y. 10022; (212) 832-2626

Total assets managed	$9,506,000,000
Total discretionary	$9,506,000,000
Total tax-exempt assets	$7,768,000,000
Total discretionary tax-exempt	$7,768,000,000
International equity assets	$134,000,000
Equity indexed assets	$1,300,000,000
Fixed-income indexed assets	$437,000,000
Dedicated/immunized assets	$550,000,000
401(k)/457 assets managed	$16,000,000
Tax-exempt clients	157
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	13
Size of research staff	4

BEA Associates is an active domestic and international/global equity, active fixed-income, balanced, short-term manager and currency hedging manager.

The firm uses a value-oriented equity approach, seeking situations where it disagrees with consensus estimates of cash flows and discount rates. Fixed-income portfolios are structured to resemble client-specified benchmarks, adding value through issue and sector selection and swapping.

About $999 million is managed in portfolio and currency hedging strategies, of which BEA manages $142 million of the underlying assets.

The asset mix Jan. 1 was 47.4% stocks, 43.2% bonds and 9.4% cash.

Fifty percent of the research is generated internally.

The firm is a general partnership with Credit Suisse Capital Corp.

William W. Priest Jr. is chief investment officer; Paula Treneer is client contact.

Beacon Capital Management

48 Wall St., 19th Floor, New York, N.Y. 10005; (212) 495-1020

Total assets managed	$987,000,000
Total discretionary	$987,000,000
Total tax-exempt assets	$899,000,000
Total discretionary tax-exempt	$899,000,000
401(k)/457 assets managed	$82,000,000
Tax-exempt clients	21
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Beacon Capital Management is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach emphasizes tactical asset allocation, which considers monetary, economic, technical and valuation measures. Its fixed-income approach uses interest rate anticipation. Treasuries and agencies mainly are bought. Options are used.

The firm follows 250 stocks closely and 1,000, generally; 25% of research is generated internally.

The parent is Bank of New York Co. Inc.

Sameon Wang is chief investment officer; Robyn Hall is client contact.

Bear Stearns Asset Management

245 Park Ave., Fifth Floor, New York, N.Y. 10167; (212) 272-2794

Total assets managed	$4,201,000,000
Total discretionary	$4,201,000,000
Total tax-exempt assets	$3,976,000,000
Total discretionary tax-exempt	$3,976,000,000
Equity real estate assets	$160,000,000
Fixed-income indexed assets	$318,000,000
Dedicated/immunized assets	$175,000,000
Mortgage-backed assets	$1,207,000,000
401(k)/457 assets managed	$100,000,000
Tax-exempt clients	114
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	9

Bear Stearns Asset Management is an active equity, active and passive fixed-income, balanced, real estate, short-term and mortgage-backed securities manager.

Its equity approach is value oriented, focusing on companies that are underpriced relative to their growth potential. The underlying belief is that companies with accelerating earnings will outperform the broad market.

Its fixed-income approach is conservative, investing primarily in high-quality securities. The firm also offers a mortgage-backed securities product. Average maturities are adjusted according to interest rate trends.

The asset mix Jan. 1 was 24% stocks, 41% bonds, 1% cash, 4% equity real estate and 30% mortgage-backed securities.

The parent is Bear Stearns & Co. Inc.

Neil T. Eigen and Peter E. Mahoney are chief investment officers; Milton B. Rubin and John F. Boneparth are client contacts.

25 largest managers of U.S. assets invested abroad

Firm	$ mils.*
State Street Bank	8,688
Wells Fargo Nikko	5,719
Capital Guardian	4,607
Baring Int'l	3,889
Brinson Partners	3,695
Rowe Price-Fleming	3,424
Schroder Capital	3,304
J.P. Morgan	3,177
Nomura Capital	2,532
Grantham Mayo v. Otterloo	2,436
WorldInvest	2,295
Warburg Investment	2,281
Templeton Int'l	2,264
Oechsle Int'l	2,200
Morgan Grenfell	2,191
Prudential Asset	2,104
Morgan Stanley	2,089
Bankers Trust	1,808
PanAgora	1,723
Global Fixed Income	1,710
GE Investments	1,665
Alliance Capital	1,659
Batterymarch Financial	1,566
Trust Co. of the West	1,484
Fiduciary Trust Int'l	1,294
Total	**69,894**

*Discretionary tax-exempt assets

P.E. Becker Inc.

1211 S.W. Fifth Ave., Suite 2185, Portland, Ore. 97204; (503) 223-1720

Total assets managed	$391,000,000
Total discretionary	$391,000,000
Total tax-exempt assets	$240,000,000
Total discretionary tax-exempt	$240,000,000
Tax-exempt clients	62
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

P.E. Becker Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses strong fundamental research to identify companies with low expectations, low p/e multiples and strong financials.

Its fixed-income approach focuses on sector analysis, seeking the best values at a given time, relative to risk.

The asset mix Jan. 1 was 35% stocks, 53% bonds and 12% cash.

The firm follows 100 stocks closely and 300, generally; 70% of research is generated internally.

Patrick E. Becker is chief investment officer; Michael C. Malone is client contact.

Becker Van Etten Inc.

135 S. LaSalle St., Suite 2011, Chicago, Ill. 60603; (312) 368-1865

Total assets managed	$105,000,000
Total discretionary	$105,000,000
Total tax-exempt assets	$64,000,000
Total discretionary tax-exempt	$64,000,000
International equity assets	$2,000,000
Tax-exempt clients	2
Types of accounts managed	FG
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	1

Becker Van Etten Inc. is an active equity and balanced manager.

Its equity approach is bottom-up and value-oriented, seeking discounted p/e or asset value and cash flow. It also seeks credible growth assumptions, backlog, sales or margin improvements.

Its fixed-income approach is passive, believing high-quality intermediate maturities will marginally outperform longer term bonds, with about the same or less standard deviation.

The asset mix Jan. 1 was 31% stocks, 56% bonds and 13% cash.

The firm follows 100 stocks closely and 1000, generally; 40% of the research is generated internally.

Robert H. Becker and R[illegible] are chief investment officers and c[illegible]

Beekman Capital Management Ltd.

1201 Third Ave., Suite 5160, Seattle, Wash. 98101; (206) 343-2275

Total assets managed	$130,000,000
Total discretionary	$130,000,000
Total tax-exempt assets	$125,000,000
Total discretionary tax-exempt	$125,000,000
Tax-exempt clients	3
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	2

Beekman Capital Management Ltd., an active equity manager, uses growth stocks and a bottom-up approach. The firm seeks high and sustainable growth rate, ROE, unit volume growth and positive price action.

The asset mix Jan. 1 was 90% stocks, 10% cash.

The firm follows 100 stocks closely and 2,000, generally; 80% of research is generated internally.

Ned Hamarat is chief investment officer; Amie Stamberg is client contact.

Bell Capital Management

1100 Circle 75 Parkway, Suite 100, Atlanta, Ga. 30339; (404) 952-7039

Total assets managed	$140,000,000
Total discretionary	$140,000,000
Total tax-exempt assets	$101,000,000
Total discretionary tax-exempt	$101,000,000
Tax-exempt clients	280
Types of accounts managed	CEF
Minimum separate account	$25,000
No. of portfolio managers	3
Size of research staff	2

Bell Capital Management Inc. is an active equity, active fixed-income, balanced, short-term and tactical asset allocation manager.

Its equity approach invests in growth stocks and uses market timing/tactical asset allocation to maximize capital appreciation. Its fixed-income approach is driven by interest rate anticipation and sector analysis. Balanced accounts hold varying combinations of common stocks, government bonds and money market instruments, and are risk averse.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

The firm follows 50 stocks closely and 1,300, generally; 50% of research is generated internally.

Ron H. Bell is chief investment officer and client contact.

Bennett & Kahnweiler Realty Advisors

9700 W. Bryn Mawr Ave., Rosemont, Ill. 60018; (708) 671-7911

Total assets managed	$567,000,000
Total discretionary	$567,000,000
Total tax-exempt assets	$567,000,000
Total discretionary tax-exempt	$567,000,000
Equity real estate assets	$567,000,000
Tax-exempt clients	2
Types of accounts managed	G

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

No. of portfolio managers	3
Size of research staff	3

Bennett & Kahnweiler Realty Advisors is a separate account real estate manager that constructs and manages custom-tailored portfolios designed to meet the specific investment polices and objectives of each client.

The asset mix Jan. 1 was 100% equity real estate.

The parent is Bennett & Kahnweiler Inc.

Ronald A. Gold is client contact.

Berents Capital Management

101 Summer St., Boston, Mass. 02110; (617) 451-2715

Total assets managed	$85,000,000
Total discretionary	$85,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	10
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	2

Berents Capital Management is an active equity and balanced manager.

The firm is a fundamental growth stock investor, investing across all stock market capitalizations.

Its fixed-income approach is based on interest rate anticipation and is risk-averse, actively managing Treasury and agency securities of one- to 10-year maturities.

The asset mix Jan. 1 was 55% stocks, 25% bonds, 20% cash.

The firm follows 60 stocks closely and 100, generally; 60% of the research is generated internally.

Charles N. "Skip" Berents Jr. is chief investment officer; Scott W. Herstin is client contact.

Berg Capital Corp.

888 Seventh Ave., New York, N.Y. 10106; (212) 956-7400

Total assets managed	$74,000,000
Total discretionary	$74,000,000
Total tax-exempt assets	$39,000,000
Total discretionary tax-exempt	$39,000,000
Tax-exempt clients	11
Types of accounts managed	CF
Minimum separate account	$2,000,000
No. of portfolio managers	2
Size of research staff	1

Berg Capital Corp. is an equity-oriented manager emphasizing capital growth and preservation of capital. Fundamental analysis is used to identify unrecognized value in specific securities and to adjust stock, bond and cash positions as warranted by perceived changes in the investment environment.

The firm follows 150 stocks closely and 250, generally.

Jonathan A. Berg is chief investment officer; Deborah C. Foord is client contact.

Berger Associates Inc.

899 Logan St., Suite 211, Denver, Colo. 80203; (303) 837-1020

Total assets managed	$70,000,000
Total discretionary	$70,000,000
Total tax-exempt assets	$13,000,000
Total discretionary tax-exempt	$13,000,000
International equity assets	$1,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	7
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	1

Berger Associates Inc. is an active domestic and international equity and balanced manager.

Its equity approach emphasizes growth and emerging growth stocks. It manages municipal bond portfolios exclusively in pre-refunded issues and secured by government bonds in escrow. Options are used.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 100 stocks closely and 500, generally; 75% of the research is generated internally.

William M. B. Berger is chief investment officer; Rodney L. Linafelter is client contact.

Sanford C. Bernstein

767 Fifth Ave., New York, N.Y. 10153; (212) 486-5800

Total assets managed	$14,572,000,000
Total discretionary	$14,572,000,000
Total tax-exempt assets	$11,855,000,000
Discretionary tax-exempt	$11,855,000,000
Mortgage-backed assets	$1,078,000,000
Tax-exempt clients	335
Types of accounts managed	CEFGJ
Minimum separate account	$400,000
No. of portfolio managers	36
Size of research staff	56

Sanford C. Bernstein & Co. Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is Graham & Dodd based. Using fundamental research, the firm calculates the expected return on virtually every security in the S&P 500, ranks them from most to least undervalued, and selects the top 20% most undervalued.

Its fixed-income approach uses research to select undervalued securities and sectors — those offering excess yields given their risk. It also varies maturity structure and shifts interest rate exposure to achieve optimal expected returns.

The asset mix Jan. 1 was 56.2% stocks, 33.8% bonds, 2.6% cash and 7.4% mortgage-backed securities.

The firm follows 540 stocks closely and 540, generally; 90% of the research is generated internally.

Peter Carman is chief investment officer; M. Richard S. Abramson is client contact.

Bessemer Trust Co. N.A.

630 Fifth Ave., New York, N.Y. 10111; (212) 708-9140

Total assets managed	$7,330,000,000
Total discretionary assets	$6,660,000,000
Total tax-exempt assets	$800,000,000
Total discretionary tax-exempt	$800,000,000
International equity assets	$140,000,000
401(k)/457 plan assets	$5,000,000
Tax-exempt clients	113
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	14
Size of research staff	10

Bessemer Trust Co. N.A. is an active domestic and international equity, active domestic and international fixed-income, balanced, real estate and short-term manager.

Its core equity approach uses market cycle/market theme analysis. It anticipates changes, identifies themes and overweights sectors it feels will be favorably affected. Fixed-income portfolios are managed within client objectives to preserve capital and enhanced returns. Specialized investments such as real estate provide a hedge against inflation and improve diversification.

The asset mix Jan. 1 was 40% stocks, 30% bonds, 18% cash and 12% closely held stock, real estate, oil and gas and private investments.

John R. Whitmore is chief investment officer; Robert C. Elliott is client contact.

Beutel, Goodman Capital Management Ltd.

2030 Texas Commerce Tower, Houston, Texas 77002; (713) 221-1790

Total assets managed	$486,000,000
Total discretionary	$486,000,000
Total tax-exempt assets	$486,000,000
Total discretionary tax-exempt	$486,000,000
Tax-exempt clients	18
Types of accounts managed	CFG
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	11

Beutel, Goodman Capital Management Ltd. is an active equity and balanced manager.

It is a bottom-up stock picker with a value approach emphasizing asset value, cash flow, balance sheet strength and earnings power. A proprietary valuation screening method is used and primary research is emphasized. Balanced accounts are managed with an approach emphasizing interest rate anticipation and quality swaps.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 500 stocks closely and 40, generally; 60% of the research is generated internally.

The parent is Beutel, Goodman & Co. Ltd.

Robert F. McFarland is chief investment officer; J. Philip Ferguson is client contact.

Beutel, Goodman International

5-6 St. Andrews Hill, London EC4V 5BY U.K.; 011-44-71-489-0218

Total assets managed	$591,000,000
Total discretionary	$591,000,000
Total tax-exempt assets	$520,000,000
Total discretionary tax-exempt	$520,000,000
International fixed-income	$463,000,000
Tax-exempt clients	2
Types of accounts managed	CG
Minimum separate account	$25,000,000
No. of portfolio managers	2

Beutel, Goodman International, an active international/global fixed-income manager, applies relative value analysis across countries. The focus of the approach is active country allocation in liquid markets. The firm principally uses high-quality securities with maturities at the medium to long end of the market.

The asset mix Jan. 1 was 89% bonds and 11% cash.

The firm generates 75% of its research internally.

Olaf Rogge is chief investment officer; Julie Cochran is client contact at (203) 254-7254.

Birtcher Realty Advisors

27611 La Paz Road, Laguna Niguel, Calif. 92656; (714) 643-7525

Total assets managed	$1,159,000,000
Total discretionary	$1,159,000,000
Total tax-exempt assets	$159,000,000
Total discretionary tax-exempt	$159,000,000
Equity real estate assets	$159,000,000
Tax-exempt clients	14
Types of accounts managed	FGJ
Minimum separate account	$30,000,000
No. of portfolio managers	5
Size of research staff	3

Birtcher Realty Advisors, a real estate manager, acquires income-producing industrial, retail and office properties of between $5 million and $50 million in growth markets nationwide. It focuses on quality investment assets utilizing a value orientation.

All assets were in equity real estate Jan. 1.

Albert S. Nagy is chief investment officer; Stanley L. Iezman is client contact.

Investment management consultants will be profiled in the Nov. 11 issue.

Bishop Trust Co. Ltd.

1000 Bishop St., Honolulu, Hawaii 96813; (808) 523-2111

Total assets managed	$1,982,000,000
Total discretionary	$1,500,000,000
Total tax-exempt assets	$79,000,000
Total discretionary tax-exempt	$79,000,000
Equity real estate assets	$7,000,000
Tax-exempt clients	430
Types of accounts managed	CEFJ
Minimum separate account	$100,000
No. of portfolio managers	5

Bishop Trust Co. Ltd. is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach focuses on quality companies with long-term growth in earnings and dividends.

In fixed-income, the company has a strong quality orientation and heavy emphasis on risk avoidance. Economic judgment is the major basis.

Its real estate strategy involves vigorous analysis of property potential.

Herbert Ho is chief investment officer; J. Ronald Clark is client contact.

Pensions & Investments' annual directory of real estate investment managers will run Sept. 16.

Blackstone Financial Management

345 Park Ave., 31st Floor, New York, N.Y. 10154; (212) 754-5526

Total assets managed	$5,000,000,000
Total discretionary	$5,000,000,000
Total tax-exempt assets	$125,000,000
Total discretionary tax-exempt	$125,000,000
Mortgage-backed assets	$50,000,000
Tax-exempt clients	2
Types of accounts managed	CG
Minimum separate account	$25,000,000
No. of portfolio managers	5
Size of research staff	13

Blackstone Financial Management, an active fixed-income manager, has a total return approach emphasizing duration targeted products. Relative value is determined using quantitative applications to weight particular sectors or securities. Options and fixed-income futures are used.

The asset mix Jan. 1 was 40% bonds, 40% mortgage-backed securities and 20% asset-backed securities.

The firm generates 95% of its research internally.

Laurence D. Fink is chief investment officer; Philip Matthews, Barbara Novick and Sue Wagner are client contacts.

Managers using overlay programs

($ millions)

Firm	All assets in overlay programs*	Underlying assets managed internally*
Alliance Capital	8,150	8,150
J.P. Morgan	6,500	3,160
Aetna Life	4,939	300
Oppenheimer Capital	2,908	0
Wells Fargo Nikko	2,019	2,019
Balch, Hardy, Scheinman	2,000	0
State Street Bank	1,824	824
TSA Capital	1,727	302
N.M. Rothschild	1,723	0
GE Investments	1,500	1,500
Bankers Trust	1,471	1,341
Darien Capital	1,185	0
Acorn Asset	1,000	0
BEA Associates	999	142
County NatWest	866	866
Rampart Investment	776	0
Matuschka	709	80
Chase Investors	706	706
Advanced Investment	650	250
QuantiLogic Asset	592	92
NCNB	450	0
Citibank Investment	251	251
Posthorn Global	251	251
Travelers	241	0
Avatar Associates	200	0
Discount Corp.	200	200
RCB Int'l	172	0
Bridgewater Asset	156	131
Harris Investment	150	150
John Hancock	111	0
Massachusetts Financial	56	56
M.D. Sass	55	55
Northern Trust	33	33
Goldman Sachs	26	26
Prime Asset	20	20
Wilkinson Boyd	17	17
Kidder Peabody Asset	10	10
Union Capital Advisors	10	10
Total	**44,653**	**28,942**

*Discretionary tax-exempt assets

George D. Bjurman & Associates

10100 Santa Monica Blvd., Suite 2300, Los Angeles, Calif. 90067; (213) 553-6577

Total assets managed	$545,000,000
Total discretionary	$545,000,000
Total tax-exempt assets	$432,000,000
Total discretionary tax-exempt	$432,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	45
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	4

George D. Bjurman & Associates is an active equity, active fixed-income and balanced manager.

Its equity approach is growth oriented, with an emphasis on high-quality companies with strong earnings and dividend growth prospects.

Fixed-income assets are strategically invested using an active approach that focuses on shifts in maturity, sector, quality and coupon structure.

The asset mix Jan. 1 was 43% stocks, 38% bonds and 21% cash.

The firm follows 90 stocks closely and 800, generally; 70% of the research is generated internally.

O. Thomas Barry III is chief investment officer and client contact.

William Blair & Co.

135 S. LaSalle St., Chicago, Ill. 60603; (312) 236-1600

Total assets managed	$2,745,000,000
Total discretionary	$2,079,000,000
Total tax-exempt assets	$1,276,000,000
Total discretionary tax-exempt	$924,000,000
International equity assets	$10,000,000
Mortgage-backed assets	$10,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	130
Types of accounts managed	CEF
Minimum separate account	$1,500,000
No. of portfolio managers	13
Size of research staff	17

William Blair & Co. is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is bottom-up using growth stocks, with a small- and medium-cap bias.

Its primary fixed-income approach emphasizes conservative maturity and high quality. It seeks consistent, non-volatile performance, and focuses on company credits and terms of bonds.

The asset mix Jan. 1 was 73% stocks, 12% bonds, 14% cash and 1% mortgage-backed securities.

The firm follows 200 stocks closely and 300, generally; 66% of the research is generated internally.

Conrad Fischer is chief investment officer; Rocky Barber is client contact.

BMI Capital Corp.

67 Wall St., New York, N.Y. 10005; (212) 422-1619

Total assets managed	$325,000,000
Total discretionary	$325,000,000
Total tax-exempt assets	$212,000,000
Total discretionary tax-exempt	$212,000,000
Tax-exempt clients	9
Types of accounts managed	CFGJ
No. of portfolio managers	4
Size of research staff	7

BMI Capital Corp., an active equity and balanced manager, uses internal research to invest in companies with high earnings growth, selling below private market value. Emphasis is on small- to medium-capitalization issues.

The asset mix Jan. 1 was 84% stocks and 16% cash.

The firm follows 100 stocks closely and 200, generally; all research is generated internally.

The parent is BMI Holding Corp.

James D. Awad is chief investment officer; Sandra A. Jerro is client contact.

Boatmen's Trust Co.

100 N. Broadway, St. Louis, Mo. 63102; (314) 466-3800

Total assets managed	$27,505,000,000
Total discretionary assets	$26,003,000,000
Total tax-exempt assets	$14,337,000,000
Discretionary tax-exempt	$13,558,000,000
International equity assets	$108,000,000
International cash assets	$9,000,000
Equity indexed assets	$481,000,000
Fixed-income indexed assets	$15,000,000
Dedicated/immunized assets	$225,000,000
Mortgage-backed assets	$1,900,000,000
401(k)/457 plan assets	$306,000,000
Tax-exempt clients	850
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	23
Size of research staff	11

Boatmen's Trust Co. is an active and passive domestic equity, active and passive fixed-income, active international/global equity, short-term and balanced manager.

Its value equity approach is driven by fundamental investment research and employs a bottom-up portfolio construction process. An explicitly defined sell discipline is applied.

Its fixed-income approach is based on interest rate anticipation using a process that focuses on macroeconomic forecasting, sector swapping and credit analysis.

The asset mix Jan. 1 was 35% stocks, 44% bonds, 7% cash and 14% mortgage-backed securities.

The bank follows 300 stocks closely and 500, generally; 50% of research is generated internally.

The parent is Boatmen's Bankshares Inc.

Thomas Darnall and Robert Franklin are chief investment officers; Richard Hibbs is client contact.

The Boston Co.

1 Boston Place, Boston, Mass. 02108; (617) 722-7000

Total assets managed	$24,919,000,000
Total discretionary	$22,830,000,000
Total tax-exempt assets	$18,853,000,000
Discretionary tax-exempt	$18,136,000,000
Equity real estate assets	$1,300,000,000
Mortgage-backed assets	$1,700,000,000
Tax-exempt clients	172
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	26
Size of research staff	14

The Boston Co. is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach uses quantitative and fundamentally based value-oriented screening, emphasizing stocks undervalued in earnings and dividend growth with appreciation potential. Its fixed-income approach combines modified interest rate anticipation, sector valuation, credit research and quantitative analysis.

Its real estate approach is opportunistic, working with quality, seasoned developers and creating risk-insulated portfolios that outperform traditional asset allocation models.

The asset mix Jan. 1 was 21% stocks, 13% bonds, 3% cash, 7% equity real estate, 9% mortgage-backed securities, 45% short-term cash and 2% asset-backed securities.

The firm follows 500 stocks closely and 7,000, generally; 90% of the research is generated internally.

The parent is American Express Co.

Desmond J. Heathwood is chief investment officer; Paul F. Healey is client contact.

Boston International Advisors Inc.

75 State St., Boston, Mass. 02109; (617) 345-9550

Total assets managed	$1,288,000,000
Total discretionary	$1,288,000,000
Total tax-exempt assets	$1,020,000,000
Total discretionary tax-exempt	$1,020,000,000
International equity assets	$1,020,000,000
Equity indexed assets	$423,000,000
Tax-exempt clients	19
Types of accounts managed	CFG
Minimum separate account	$25,000,000
No. of portfolio managers	6
Size of research staff	3

Boston International Advisors Inc. is an active and passive international/global equity manager.

The firm uses quantitative value techniques to allocate among the EAFE markets and to select

stocks within those markets. The firm also manages custom index funds such as GDP-weighted and South Africa-free, and provides currency hedging and investment in stock index futures, upon request.

The asset mix Jan. 1 was 100% stocks.

All of the research is generated internally.

Lyle H. Davis is chief investment officer; Jennifer Dunning is client contact.

Boston Overseas Investors

125 Summer St., Boston, Mass. 02110; (617) 951-0004

Total assets managed	$622,000,000
Total discretionary	$622,000,000
Total tax-exempt assets	$467,000,000
Total discretionary tax-exempt	$467,000,000
International equity assets	$444,000,000
Tax-exempt clients	6
Types of accounts managed	C
Minimum separate account	$40,000,000
No. of portfolio managers	1

Boston Overseas Investors Inc. is an active international/global equity manager.

Its value-oriented equity approach focuses on low p/es and uses a top-down approach to theme and country selection and a bottom-up approach to stock selection.

The asset mix Jan. 1 was 95% non-U.S. stocks and 5% cash.

The firm follows 200 stocks closely and 900, generally; 20% of research is generated internally.

Hakan Castegren is chief investment officer; Edward E. Wendell Jr. is client contact.

Boston Security Counsellors

60 State St., Boston, Mass. 02109; (617) 742-9858

Total assets managed	$269,000,000
Total discretionary	$266,000,000
Total tax-exempt assets	$8,000,000
Total discretionary tax-exempt	$8,000,000
401(k)/457 assets managed	$125,000
Tax-exempt clients	18
Types of accounts managed	CF
No. of portfolio managers	6
Size of research staff	1

Boston Security Counsellors Inc. is an active equity, active bond and balanced manager.

Its equity approach uses quantitative techniques to generate a universe of 200 growth stocks. Eighty percent of portfolios come from this list, with the remainder from a supplemental growth stock list.

Its fixed-income approach uses interest rate spread analysis and yield curve analysis to position portfolios in the most attractive sectors. The firm concentrates in high-grade credits with maturities from two to 12 years. It writes covered call options.

The asset mix Jan. 1 was 50% stocks, 35% bonds and 15% cash.

The firm follows 100 stocks closely and 250, generally; 25% of research is generated internally.

The parent is Advest Group Inc.

Richard P. Macklem is chief investment officer; Dana N. Merrill is client contact.

Bounty Management Corp.

The Bedford Building, 99 Bedford St., Boston, Mass. 02111; (617) 357-8285

Total assets managed	$85,000,000
Total discretionary	$85,000,000
Total tax-exempt assets	$57,000,000
Total discretionary tax-exempt	$57,000,000
401(k)/457 assets managed	$100,000
Tax-exempt clients	50
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	3

Bounty Management Corp. is an active equity and balanced manager.

Its primary equity strategy is fundamentally oriented, combining growth and value investing based on a contrarian approach.

In fixed income, it swings in and out on the Treasury yield curve based on year-to-year interest rate forecasts for long-term investments only.

The asset mix Jan. 1 was 47.4% stocks, 39.7% bonds and 12.9% cash.

The firm follows 300 stocks closely and 600, generally.

Raymond N. Bligh is chief investment officer; Pamela A. Vamale is client contact.

Bowen, Hanes & Co. Inc.

100 Galleria Parkway NW, Suite 670, Atlanta, Ga. 30339; (404) 951-8891

Total assets managed	$850,000,000
Total discretionary	$821,000,000
Total tax-exempt assets	$560,000,000
Total discretionary tax-exempt	$551,000,000
Equity real estate assets	$9,000,000
Mortgage-backed assets managed	$2,000,000
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	1

Bowen, Hanes & Co. Inc. is an active domestic and international equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach is conservative, quality oriented and top down. Its fixed-income approach is based on interest rate anticipation.

In real estate, it seeks capital gains opportunities in undeveloped land.

The asset mix Jan. 1 was 70% stocks, 22% bonds, 6% cash, 1.7% equity real estate and 0.3% mortgage-backed securities.

The firm follows 50 stocks closely and 100, generally; 90% of research is generated internally.

Harold J. Bowen Jr. is chief investment officer; Jay Bowen is client contact.

Boylston Capital Advisors

501 Boylston St., Boston, Mass. 02117; (617) 578-2783

Total assets managed	$6,493,000,000
Total discretionary	$6,376,000,000
Total tax-exempt assets	$2,845,000,000
Total discretionary tax-exempt	$2,845,000,000
Mortgage assets	$2,070,000,000
Dedicated/immunized assets	$775,000,000
Tax-exempt clients	2
Types of accounts managed	CGJ
Minimum separate account	$50,000,000
No. of portfolio managers	6
Size of research staff	1

Boylston Capital Advisors is a mortgage and private placement manager, seeking the best return given a client's risk/return profile. Options and fixed-income futures are used.

The asset mix Jan. 1 was 26% bonds, 73% mortgages and 1% limited partnerships.

The parent is The New England.

Frederick K. Zimmermann is chief investment officer; Antwine Jefferson is client contact.

Boys, Arnold & Co.

P.O. Box 5255, Asheville, N.C. 28813; (704) 274-1542

Total assets managed	$241,000,000
Total discretionary	$241,000,000
Total tax-exempt assets	$124,000,000
Total discretionary tax-exempt	$124,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	60
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Boys, Arnold & Co. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes growth stocks, which typically form two-thirds of a portfolio's holdings, while sector rotation will influence the remaining holdings and is driven by the economic cycle.

Its fixed-income approach is driven by interest rate anticipation, emphasizing high quality, liquidity and sector and maturity diversification.

The asset mix Jan. 1 was 42% stocks, 48% bonds and 10% cash.

G. Waring Boys III is chief investment officer; John B. Kuhns is client contact.

Bradford Investment Management

330 Commerce St., Nashville, Tenn. 37201; (615) 748-9422

Total assets managed	$106,000,000
Total discretionary	$97,000,000
Total tax-exempt assets	$64,000,000
Total discretionary tax-exempt	$62,000,000
401(k)/457 assets managed	$800,000
Tax-exempt clients	53
Types of accounts managed	CEFG
Minimum separate account	$300,000
No. of portfolio managers	2
Size of research staff	2

Bradford Investment Management is an active equity, active fixed-income and balanced manager. Its primary equity approach is to invest in businesses with long-term records of increasing earnings and dividends at an above-average pace, strong balance sheets and high returns on equity.

Fixed-income relies on interest rate anticipation, emphasizing capital preservation and secure income using laddered investment-grade bonds.

The asset mix Jan. 1 was 45% stocks, 40% bonds and 15% cash.

The firm follows 100 stocks closely and 2,000, generally; 95% of research is generated internally.

The parent is J.C. Bradford & Co.

Bruce Cook is chief investment officer; Tom Pollock is client contact.

Brandywine Asset Management

3 Christina Centre, Suite 1200, 201 N. Walnut St., Wilmington, Del. 19801; (302) 654-6162

Total assets managed	$960,000,000
Total discretionary	$960,000,000
Total tax-exempt assets	$925,000,000
Total discretionary tax-exempt	$925,000,000
Tax-exempt clients	35
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	6

Brandywine Asset Management, an active and passive equity manager, invests exclusively in the lowest 25% of the p/e spectrum, producing consistent returns in excess of the market with controlled volatility.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 60 stocks closely and 300, generally; 70% of research is generated internally.

W. Anthony Hitschler is chief investment officer; Willard J. Scott is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

Stacey Braun Associates

377 Broadway, New York, N.Y. 10013; (212) 226-7707

Total assets managed	$1,520,000,000
Total discretionary	$1,511,000,000
Total tax-exempt assets	$1,502,000,000
Total discretionary tax-exempt	$1,502,000,000
Mortgage-backed assets	$140,000,000
Tax-exempt clients	56
Types of accounts managed	CGJ
Minimum separate account	$1,000,000
No. of portfolio managers	4

Stacey Braun Associates is an active equity, active fixed-income and balanced manager.

Its equity approach is uses Graham & Dodd-based analysis. The major criteria in selection are reasonably consistent earnings growth, low p/e multiples and dependable dividends for above-average yields. Its primary fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 20% stocks, 68% bonds, 3% cash and 9% mortgage-backed securities.

The firm follows 150 stocks closely and 200, generally; 10% of the research is generated internally.

Martin H. Wexler is chief investment officer and client contact.

Breau Capital Management

Water Mill Center, 800 South St., Waltham, Mass. 02154; (617) 893-0600

Total assets managed	$118,000,000
Total discretionary	$118,000,000
Total tax-exempt assets	$118,000,000
Total discretionary tax-exempt	$118,000,000
Tax-exempt clients	8
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	2

Breau Capital Management Inc., an active equity manager, holds value-oriented portfolios emphasizing low p/e and price-to-book multiples, overlooked companies and undervalued assets.

The firm follows 100 stocks closely and 125, generally; 95% of the research is generated internally.

Edward P. Breau is chief investment officer and client contact.

Daniel Breen & Co.

700 Louisiana, Suite 2650, Houston, Texas 77002; (713) 223-2110

Total assets managed	$1,447,000,000
Total discretionary	$1,447,000,000
Total tax-exempt assets	$1,252,000,000
Total discretionary tax-exempt	$1,252,000,000
Tax-exempt clients	42
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	4

Daniel Breen & Co. L.P. is an active equity, active fixed-income and balanced manager.

Its equity approach is focused on undervalued growth stocks and stocks benefitting from longer-term structural changes in the economy. A disciplined quantitative approach is tempered with fundamental judgment to achieve reasonable income with an emphasis on capital appreciation.

Its fixed-income approach is based on duration adjustment, primarily using U.S. Treasury securities. The maturity of the portfolio is adjusted based on the use of statistical models that help identify interest rate trends.

The asset mix Jan. 1 was 41% stocks, 54% bonds and 5% cash.

The firm follows 60 stocks closely and 600, generally; 60% of the research is generated internally.

Daniel A. Breen is chief investment officer; Edward S. McCullough and C. Gordon Biggar Jr. are client contacts.

Bridgewater Asset Management

372 Danbury Road, Wilton, Conn. 06897; (203) 762-8511

Total assets managed	$531,000,000
Total discretionary	$531,000,000
Total tax-exempt assets	$298,000,000
Total discretionary tax-exempt	$298,000,000
International bonds	$131,000,000
Tax-exempt clients	12
Types of accounts managed	CEFJ
Minimum separate account	$5,000,000
No. of portfolio managers	7

Bridgewater Asset Management is an active domestic and international/global fixed income, short-term, currency overlay and global tactical asset allocation manager.

The firm evaluates the relative merits of major markets using fundamentals and technical systems that monitor economic conditions and identify changes. It will go short at customer request.

The firm manages $156 million in currency overlay programs, of which $131 million of the underlying assets are managed in-house.

The asset mix Jan. 1 was 100% bonds.

The parent is the Bridgewater Group.

Ray Dalio is chief investment officer; Kevin E. Sullivan is client contact.

Brinson Partners Inc.

3 First National Plaza, Chicago, Ill. 60602; (312) 220-7100

Total assets managed	$14,097,000,000
Total discretionary	$14,097,000,000
Total tax-exempt assets	$13,222,000,000
Discretionary tax-exempt	$13,222,000,000
International equity assets	$1,509,000,000
International fixed-income	$2,186,000,000
Dedicated/immunized assets	$322,000,000
401(k)/457 assets managed	$584,000,000
Tax-exempt clients	256
Types of accounts managed	CEFGJ
No. of portfolio managers	19
Size of research staff	52

Brinson Partners Inc. is an active domestic and international equity and fixed-income, domestic and global balanced, tactical asset allocation, venture capital and short-term manager.

Its equity approach is value oriented, based on fundamental research. It identifies mispriced securities in shifting market environments, selecting stocks within the context of disciplined judgments on market timing, sector exposures and industry.

For fixed income, a portfolio's interest rate, yield curve, quality/sector and issue-specific exposures are managed to outperform a selected benchmark during an interest rate cycle.

Options and financial futures are used.

In addition to the assets listed above, $762 million in discretionary tax-exempt real estate assets are run by external managers.

The asset mix Jan. 1 was 31.5% stocks, 50.1% bonds, 15.2% cash and 3.2% venture capital.

The firm follows 700 stocks closely and 1,800, generally; 95% of research is generated internally.

Gary P. Brinson is chief investment officer; Ed Hamill is client contact.

Brouwer & Janachowski Inc.

230 California St., Suite 420, San Francisco, Calif. 94111; (415) 362-4160

Total assets managed	$175,000,000
Total discretionary	$125,000,000
Total tax-exempt assets	$75,000,000
Total discretionary tax-exempt	$75,000,000
International equity assets	$25,000,000
401(k)/457 assets managed	$50,000,000
Tax-exempt clients	40
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Brouwer & Janachowski Inc. is an active domestic and international equity and balanced manager.

Its equity approach uses diversified portfolios, of no-load mutual funds, based on the clients' investment objectives. Its fixed-income approach uses interest-rate anticipation.

The asset mix Jan. 1 was 53% stocks, 40% bonds and 7% cash.

Steve Janachowski is chief investment officer; Randolph D. Eyler is client contact.

The case for in-house management will be examined June 10.

Brown Brothers Harriman

59 Wall St., New York, N.Y. 10005; (212) 483-1818

Total assets managed	$14,465,000,000
Total discretionary	$14,465,000,000
Total tax-exempt assets	$5,394,000,000
Total discretionary tax-exempt	$5,394,000,000
International equity assets	$410,900,000
International fixed-income	$594,000,000
Mortgage-backed assets	$635,000,000
401(k)/457 assets managed	$580,000,000
Tax-exempt clients	314
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	79
Size of research staff	30

Brown Brothers Harriman & Co. is an active domestic and international equity, active domestic and international bond, balanced and short-term manager.

Based on fundamental analysis, sector rotation and value screening, its equity approach uses stock selection, diversification and market timing. Options are used.

Its fixed-income approach is based on an active trading strategy employed in an effort to capture incremental returns through three complementary strategies: volatility control, sector allocations and arbitrage trading.

The firm follows 280 stocks closely and 500, generally; 70% of the research is generated internally.

Elbridge T. Gerry Jr. is chief investment officer; Paul A. Legvold is client contact.

Alex. Brown Kleinwort Benson Realty Advisors

2 N. Charles St., Baltimore, Md. 21201; (301) 783-3200

Total assets managed	$3,923,000,000
Total discretionary	$3,635,000,000
Total tax-exempt assets	$3,635,000,000
Total discretionary tax-exempt	$3,635,000,000
Equity real estate assets	$3,053,000,000
Mortgage assets	$291,000,000
Tax-exempt clients	8
Types of accounts managed	G
Minimum separate account	$50,000,000
No. of portfolio managers	20
Size of research staff	2

Alex. Brown Kleinwort Benson Realty Advisors Corp., a domestic and international real estate manager, specializes in all-cash acquisitions, joint ventures and equity-related commercial real estate investments.

It makes direct real estate investments of $2 million to $150 million in high-quality existing and to-be-built shopping centers, warehouse/distribution, research development and office facilities.

The asset mix Jan. 1 was 84% equity real estate, 8% mortgages and 8% real estate securities and private placements.

The firm follows 50 REITs closely and 50, generally; all research is generated internally.

All minority/women-owned firms

Ambs Investment Counsel
Amerindo Investment Advisors
Amervest
Aquarius Capital*
Ariel Capital
Athene Coronado*
Beekman Capital
Cadinha
Capitalcorp Asset
Cartwright & Goodwin
CIC Asset
Clemente Capital*
Conus & Nicholson
Cook Inlet Investment
Cornell Capital
DeJarnette Investment*
EMG Advisors
ERIAC
Evergreen Asset*
EverGreen Capital
Ewing Capital
Financial Aims
Galleon Capital
Garrett Realty
Graistone Realty*
GW Capital
Hamilton Management Group
Holt-Smith & Renk
Howard & McInnes
Institutional Portfolio Services
Johnson Investment Counsel
Joseph Group*
Karpus Investment
Kenwood Group
W.R. Lazard
R.M. Leary
Lee Asset
Llama Asset
Marshall Plan
Merchants Capital
Mosa Capital
MPT Associates
Nakagama & Wallace
NCM Capital
Newgate Management Associates
North American Capital
Oak Hall Capital Advisors
Payden & Rygel
Precision Asset*
Prime Asset
Progress Investment
Rainier Investment
Realty Income Advisors
Reich & Tang
Reid & McCoy
RhumbLine Advisors
Rosen Associates
Rosenblum-Silverman-Sutton*
Sit Investment Associates
Sit/Kim Int'l
Smith, Graham
Solon Asset
Statistical Sciences
Strategic Investment Partners
Taplin, Canida & Habacht
Tiffany Capital Advisors
Valenzuela Capital
Value Line Asset
ValueQuest*
Wagner & Hamil
Wedgewood Capital*
Westwood
WFG Investment
Denis Wong & Associates
Zevenbergen Capital

*These firms are not profiled because either the questionnaire was received after deadline or they had no U.S. tax-exempt discretionary assets under management Jan. 1.

John W. Guinee III is chief investment officer; Jack S. Griswold and Winston H. Hickox are client contacts.

C.H. Brown Co. Inc.

1433 Utica Ave. S., Suite 165, Minneapolis, Minn. 55416; (612) 544-8411

Total assets managed	$75,000,000
Total discretionary	$75,000,000
Total tax-exempt assets	$56,000,000
Total discretionary tax-exempt	$56,000,000
Tax-exempt clients	34
Types of accounts managed	CF
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

C.H. Brown Co. Inc. is an active equity, active bond and balanced manager.

Its quantitative, computer-directed equity approach uses sector rotation and market timing/tactical asset allocation focusing exclusively on S&P 500 stocks. Its fixed-income approach uses computer analysis of historical interest rates. Risk/reward parameters are established and compared with current yield curve.

The asset mix Jan. 1 was 51% stocks, 16.6% bonds and 32.4% cash.

The firm follows 500 stocks closely; all research is generated internally.

Richard P. Halverson is chief investment officer; Richard H. Brown is client contact.

Brundage, Story and Rose

1 Broadway, New York, N.Y. 10004; (212) 269-3050

Total assets managed	$2,821,000,000
Total discretionary	$1,646,000,000
Total tax-exempt assets	$1,179,000,000
Total discretionary tax-exempt	$1,066,000,000
International equity assets	$62,000,000
International fixed-income	$10,000,000
Mortgage-backed assets	$16,000,000
401(k)/457 assets managed	$30,000,000
Tax-exempt clients	180
Types of accounts managed	CEFGJ
Minimum separate equity account	$5,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	20
Size of research staff	3

Brundage, Story and Rose is an active equity, active fixed-income and balanced manager.

Its equity approach is to make long-term, financially conservative, quality value investments, emphasizing fundamental research. The firm seeks undervalued companies that are asset rich (tangible or intangible) and demonstrate solid underlying growth in earnings.

Its fixed-income approach is quantitative and disciplined with a strong emphasis on issue selection. Duration is matched in aggregate and by sector/yield curve segmentation. Core strategies include Liability Focused Management and Index Plus Management. Fixed-income futures are used.

The asset mix Jan. 1 was 78.5% stocks, 19% bonds, 1.3% cash and 1.2% mortgage-backed securities.

The firm follows 225 stocks closely and 450, generally; 90% of the research is generated internally.

Malcolm D. Clarke Jr. and Charles G. Watson are chief investment officers; John F. Norris is client contact.

BTR Capital Management

550 Kearny St., Suite 510, San Francisco, Calif. 94108; (415) 989-0100

Total assets managed	$110,000,000
Total discretionary	$110,000,000
Total tax-exempt assets	$50,000,000
Total discretionary tax-exempt	$50,000,000
International equity assets	$4,000,000
International fixed-income	$2,000,000
401(k)/457 assets managed	$30,000,000
Tax-exempt clients	32
Types of accounts managed	CF
Minimum separate account	$1,000,000
No. of portfolio managers	2

BTR Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach is concept/sector driven, emphasizing quality, value and total return. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 35% stocks, 40% bonds and 25% cash.

The firm follows 50 stocks closely and 100, generally; 25% of research is generated internally.

Lewis H. Katcher is chief investment officer and client contact.

Buffalo Capital Corp.

4350 Von Karman, Suite 490, Newport Beach, Calif. 92660; (714) 476-2799

Total assets managed	$28,000,000
Total discretionary	$28,000,000
Total tax-exempt assets	$28,000,000
Total discretionary tax-exempt	$28,000,000
International equity assets	$2,000,000
Tax-exempt clients	125
Types of accounts managed	CG
Minimum separate account	$50,000
No. of portfolio managers	3
Size of research staff	1

Buffalo Capital Corp. is an active equity, active fixed-income and tactical asset allocation manager.

The firm specializes in tactical asset allocation, using no-load mutual funds. It attempts to place assets in capital appreciation funds in rising markets and to defensively position assets in money market funds during market downturns.

Mark A. Hoppe is chief investment officer and client contact.

Burgess Capital Corp.

499 Seaport Court, Suite 201, Redwood City, Calif. 94063; (415) 369-4545

Total assets managed	$277,000,000
Total discretionary	$277,000,000
Total tax-exempt assets	$202,000,000
Total discretionary tax-exempt	$202,000,000
International equity assets	$115,000,000
Tax-exempt clients	15
Types of accounts managed	CF
Minimum separate account	$5,000,000
No.of portfolio managers	5

Burgess Capital Corp. is an active international/global equity and balanced manager.

Its equity approach is growth-stock oriented and uses tactical asset allocation. Its risk-averse, top-down global approach is based on fundamental analysis of economic, monetary and industry trends worldwide. Holdings are concentrated in 20 to 35 large- and medium-cap high-quality issues.

The asset mix Jan. 1 was 57% equities and 43% cash.

The firm follows 100 stocks closely and 500, generally.

Robert F. Burgess is chief investment officer; Robert F. Osborne is client contact.

Burnham & Co.

202 Federal Square Building, Grand Rapids, Mich. 49503; (616) 459-1043

Total assets managed	$400,000,000
Total discretionary	$400,000,000
Total tax-exempt assets	$300,000,000
Total discretionary tax-exempt	$300,000,000
Tax-exempt clients	70
Types of accounts managed	CEFG
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	2

Burnham & Co. is an active equity, active bond, balanced and cash manager.

Its equity approach relies on emerging growth and growth stocks. Its fixed-income approach focuses on interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

The firm follows 30 stocks closely and 50, generally.

Robert W. Burnham is chief investment officer and client contact.

The Burridge Group Inc.

115 S. LaSalle St., Chicago, Ill. 60603; (312) 368-0066

Total assets managed	$266,000,000
Total discretionary	$254,000,000
Total tax-exempt assets	$223,000,000
Total discretionary tax-exempt	$223,000,000
Tax-exempt clients	13
Types of accounts managed	CEFG
Minimum separate account	$3,000,000
No. of portfolio managers	2

The Burridge Group Inc., an active equity and balanced manager, emphasizes growth stocks, using qualitative and quantitative steps to make long-term investments in companies with superior earnings growth.

The asset mix Jan. 1 was 94% stocks and 6% cash.

The firm follows 50 stocks closely and 200, generally; 30% of the research is generated internally.

Richard M. Burridge is chief investment officer; John H. Streur Jr. is client contact.

BZW Investment Management Ltd.

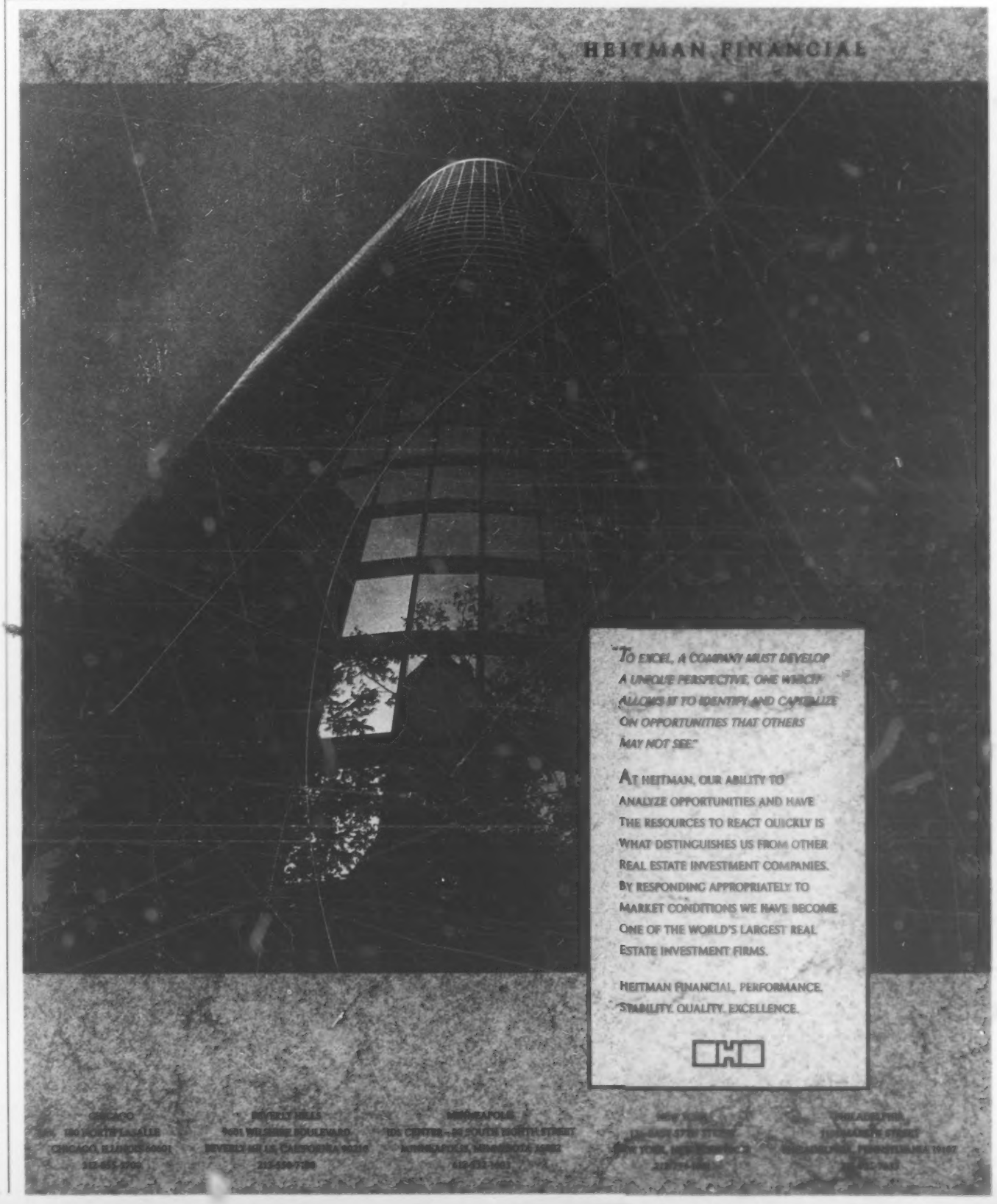
222 Broadway, New York, N.Y. 10038; (212) 412-5011

Total assets managed	$36,300,000,000
Total discretionary	$36,040,000,000
Total tax-exempt assets	$144,000,000
Total discretionary tax-exempt	$144,000,000
International equity assets	$88,000,000
International fixed-income	$42,000,000
International cash assets	$12,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$25,000,000
No. of portfolio managers	132

BZW Investment Management Ltd., an international manager, uses a quantitative approach, combining passive, disciplined, active and tactical asset allocation features. The primary fixed-income approach focuses on interest rate forecasting and balancing maturity and quality risk against client objectives. Derivatives are used.

Michael Horsburgh is client contact.

The *P&I*/InterSec 300, a listing of the largest pension funds in the world, will be published in the Aug. 5 issue.



C

Cabot Partners L.P.
60 State St., Boston, Mass. 02109; (617) 723-0900

Total assets managed	$900,000,000
Total discretionary	$900,000,000
Total tax-exempt assets	$810,000,000
Total discretionary tax-exempt	$810,000,000
Equity real estate assets	$810,000,000
Tax-exempt clients	10
Types of accounts managed	CEFG
Minimum separate account	$100,000,000

Cabot Partners L.P., formerly Cabot, Cabot, & Forbes Realty Advisors Inc., is a real estate manager providing separate account and co-investment program management of equity real estate portfolios of office and industrial properties.

The asset mix Jan. 1 was 100% equity real estate.

Ferdinand Colleredo-Mansfeld is chief investment officer; Robert M. Angland is client contact.

Cadence Capital Management Corp.
10 Liberty Square, Boston, Mass. 02109; (617) 451-0250

Total assets managed	$302,000,000
Total discretionary	$259,000,000
Total tax-exempt assets	$286,000,000
Total discretionary tax-exempt	$256,000,000
Tax-exempt clients	13
Types of accounts managed	CEFGJ
No. of portfolio managers	4

Cadence Capital Management Corp., an active equity manager, takes a disciplined and bottom-up approach, focusing on issues offering a combination of improving fundamentals and favorable valuations. The approach is used for large-cap and small-cap strategies.

David B. Breed is chief investment officer; Jock McQuilkin is client contact.

Cadinha & Co. Inc.
900 Fort Street Mall, Suite 1240, Honolulu, Hawaii 96813; (808) 523-9488

Total assets managed	$311,000,000
Total discretionary	$311,000,000
Total tax-exempt assets	$237,000,000
Total discretionary tax-exempt	$237,000,000
Tax-exempt clients	143
Types of accounts managed	CEGJ
Minimum separate account	$500,000
No. of portfolio managers	5

Cadinha & Co. Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is based on growth stocks, using fundamental analysis in determining companies' anticipated growth. Its fixed-income approach uses interest rate anticipation, with yield curve analysis determining the proper maturity placement of high-quality debt.

The asset mix Jan. 1 was 42% stocks, 39% bonds and 19% cash.

The firm follows 50 stocks closely and 100, generally; 50% of research is generated internally.

Harlan J. Cadinha is chief investment officer; Janis Akuna is the client contact.

Calcasieu Marine National Bank
P.O. Box 3403, Lake Charles, La. 70602; (318) 494-3317

Total assets managed	$92,000,000
Total discretionary	$92,000,000
Total tax-exempt assets	$57,000,000
Total discretionary tax-exempt	$57,000,000
Equity real estate assets	$570,000
Mortgage assets	$1,000,000
Mortgage-backed assets	$3,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	60
Types of accounts managed	CEFGJ
Minimum separate account	$100,000
No. of portfolio managers	1

Calcasieu Marine National Bank is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is conservative, with emphasis on value, quality and large market capitalization. Its primary fixed-income approach is based on sector rotation; interest rate anticipation also is used.

The asset mix Jan. 1 was 17% stocks, 70% bonds, 5% cash, 1% equity real estate, 2% mortgages and 5% mortgage-backed securities.

Ben W. Buck is chief investment officer; Fred M. Lee is client contact.

Cambiar Investors Inc.
8400 E. Prentice Ave., Suite 460, Englewood, Colo. 80111; (303) 793-3939

Total assets managed	$397,000,000
Total discretionary	$397,000,000
Total tax-exempt assets	$359,000,000
Total discretionary tax-exempt	$359,000,000
International equity assets	$25,000,000
Types of accounts managed	CFG
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	2

Cambiar Investors Inc. is an active domestic and international/global equity and short-term manager.

Focusing on growth and low p/e stocks, the firm uses relative valuation screens and fundamental analysis to identify sound companies at positive inflection points for a minimum 50% appreciation potential.

The asset mix Jan. 1 was 55.3% stocks, 0.9% bonds and 43.8% cash.

The firm follows 200 to 300 stocks closely and more than 500, generally; 50% of research is generated internally.

The parent is United Asset Management.

Michael S. Barish is chief investment officer; Wanda Hartgraves is client contact.

Campbell, Cowperthwait
215 E. 49th St., New York, N.Y. 10017; (212) 421-3561

Total assets managed	$272,000,000
Total discretionary	$272,000,000
Total tax-exempt assets	$86,000,000
Total discretionary tax-exempt	$86,000,000
Tax-exempt clients	8
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Campbell, Cowperthwait & Co. Inc. is an active equity, passive fixed-income, balanced and short-term manager.

Its equity approach focuses on high-quality growth stocks, and buys for the long term. It has low turnover and does not attempt to time the market.

The asset mix Jan. 1 was 90% stocks, 8% bonds and 2% cash.

The firm follows 50 stocks closely and 100, generally; 20% of research is generated internally.

William G. Campbell is chief investment officer; James B. Cowperthwait is client contact.

Campbell, Reed, Conner & Birdwell Inc.
11,111 Santa Monica Blvd., Suite 1700, Los Angeles, Calif. 90025; (213) 478-4005

Total assets managed	$495,000,000
Total discretionary	$495,000,000
Total tax-exempt assets	$225,000,000
Total discretionary tax-exempt	$225,000,000
Tax-exempt clients	38
Types of accounts managed	CF
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	1

25 largest managers of mortgage-backed securities

Firm	$ mils.*
Pacific Investment	9,526
J.P. Morgan	4,291
New York Life	4,179
Lincoln Nat'l	3,232
RCM Capital	3,200
Franklin Advisers	2,948
Miller, Anderson	2,867
Equitable Capital	2,581
Prudential Asset	2,481
Massachusetts Mutual	2,413
Aetna Life	2,395
Jennison Associates	2,382
Standish, Ayer & Wood	2,156
Transamerica	2,057
Duff & Phelps	2,000
Boatmen's Trust	1,900
Glenmede Trust	1,800
State Street Research	1,750
Boston Co.	1,700
Scudder, Stevens & Clark	1,580
Wells Fargo Nikko	1,520
McMorgan	1,512
T. Rowe Price Associates	1,385
Travelers	1,265
Bear Stearns	1,207
Total	**64,327**

*Discretionary tax-exempt assets

Campbell, Reed, Conner & Birdwell Inc. is an active equity, active bond and balanced manager.

Its equity approach is quality growth oriented. It uses a bottom-up fundamental approach that seeks to buy high-quality, intelligently managed companies that are growing earnings, cash flows and/or asset values in excess of the market but which are selling at discounts to the market.

Its fixed-income approach is a limited maturity approach, seeking to capture 70% to 80% of the yield of longer-term maturities with much less volatility and inflation risk.

The firm follows 70 stocks closely and 200, generally; 90% of the research is generated internally.

Donn S. Conner, president, is chief investment officer; Jeffrey Bronchick is client contact.

P&I examines cross-border financing in the May 27 issue.

Canagex Investments Ltd.
625 Rene Levesque Blvd. W., Suite 600, Montreal, Quebec H3B 1R2; (514) 954-3300

Total assets managed	$1,450,000,000
Total discretionary	$1,450,000,000
Total tax-exempt	$545,000,000
Total discretionary tax-exempt	$545,000,000
For subsidiaries of U.S. firms	$89,000,000
Tax-exempt clients	26
U.S. subsidiaries	2
Types of accounts managed	CF
No. of portfolio managers	6
Size of research staff	5

Canagex Investments Ltd., a Canadian firm, is an active equity, active and passive fixed-income, balanced, short-term and tactical asset allocation manager.

Its equity approach is value oriented, using low p/e and growth stocks. In fixed income, it uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 25% Canadian stocks, 10% U.S. equities, 55% fixed income and 10% cash.

The parent is The Laurentian Group Corp.

Marc St. Pierre is chief investment officer; Brian Philbin is client contact.

Capital Consultants Inc.
2300 S.W. First Ave., Portland, Ore. 97201; (503) 241-1200

Total assets managed	$670,000,000
Total discretionary	$600,000,000
Total tax-exempt assets	$488,000,000
Total discretionary tax-exempt	$488,000,000
Equity real estate assets	$89,000,000
Mortgage assets	$100,000,000
Equity indexed assets	$13,000,000
Fixed-income indexed assets	$5,000,000
401(k)/457 assets managed	$15,000,000
Tax-exempt clients	86
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	2

Capital Consultants Inc. is an active equity, active fixed-income, balanced, tactical asset allocation, real estate and short-term manager.

Its equity approach is value oriented, bottom-up and disciplined. Its fixed-income approach is based on interest rate anticipation, incorporating modest shifts in rate sensitivity and low volatility. It uses options and stock index futures.

Its real estate approach focuses on properties mainly in the West and on office buildings, industrial properties and assisted-care residential centers.

The asset mix Jan. 1 was 15.8% stocks, 23.8% bonds, 20.6% cash, 18.3% equity real estate, 20.5% mortgages and 1% private placements.

Gregory J. Houser is chief investment officer; Richard A. Becher is client contact.

Capital Growth Management
1 International Place, Boston, Mass. 02110; (617) 737-3225

Total assets managed	$1,504,000,000
Total discretionary	$1,504,000,000
Total tax-exempt assets	$803,000,000
Total discretionary tax-exempt	$803,000,000
Tax-exempt clients	15
Types of accounts managed	CEFGJ
Minimum separate account	$20,000,000
No. of portfolio managers	4
Size of research staff	1

Capital Growth Management, an active equity manager, stresses growth stock, emerging growth and sector rotation. The firm offers a specialized, concentrated equity management to complement other styles in a multimanager regime.

The asset mix Jan. 1 was 99.7% stocks and 0.3% cash.

The firm follows 200 stocks closely and 600, generally; 80% of the research is generated internally.

The firm is affiliated with The New England.

G. Kenneth Heebner is chief investment officer; Dugal Thomas and Morgan P. Hatch are client contacts.

Capital Guardian Trust Co.
333 S. Hope St., 52nd Floor, Los Angeles, Calif. 90071; (213) 486-9200

Total assets managed	$20,297,000,000
Total discretionary assets	$19,942,000,000
Total tax-exempt assets	$20,122,000,000
Discretionary tax-exempt	$19,554,000,000
International equity assets	$3,888,000,000
International fixed-income	$141,000,000
International cash assets	$578,000,000
Tax-exempt clients	157
Types of accounts managed	CEFG
Minimum separate account:	
Domestic	$20,000,000
International/global	$10,000,000
No. of portfolio managers	11
Size of research staff	79

Capital Guardian Trust Co. is an active domestic and international equity, active domestic and international bond, and balanced manager.

Its equity approach is based on thorough, detailed research and analysis, with an emphasis on value. Its fixed-income approach is two-thirds interest rate anticipation and one-third security selection, again using detailed research and analysis with emphasis on value.

The asset mix Jan. 1 was 76% stocks, 14% bonds and 10% cash.

The parent is The Capital Group.

Richard C. Barker is chief investment officer; John H. Seiler is client contact.

Capital Investment Advisors
1301 Basswood Road, Suite 385, Schaumburg, Ill. 60173; (708) 884-1555

Total assets managed	$45,000,000
Total discretionary	$45,000,000
Total tax-exempt assets	$39,000,000
Total discretionary tax-exempt	$39,000,000
Tax-exempt clients	9
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	2

Capital Investment Advisors Inc., an active equity and balanced manager, follows a yield growth equity approach that selects issues with a growing dividend stream such that the income generated will exceed that of a long-term Treasury bond over time.

The asset mix Jan. 1 was 90% stocks and 10% cash.

Twenty percent of research is generated internally.

Allen R. Kuseski is chief investment officer; Jeffrey C. Skibinski is client contact.

Capital Investment Services of America
700 N. Water St., Suite 325, Milwaukee, Wis. 53202; (414) 278-7744

Total assets managed	$650,000,000
Total discretionary	$650,000,000
Total tax-exempt assets	$455,000,000
Total discretionary tax-exempt	$455,000,000
Tax-exempt clients	200
Types of accounts managed	EFG
Minimum separate account	$500,000
No. of portfolio managers	6

Capital Investment Services of America is an active equity, active fixed-income and balanced manager.

Its equity approach uses fundamental analysis to identify growth and emerging growth stocks. Sector rotation is also used.

For fixed income, interest rate anticipation and sector analysis are used, emphasizing quality analysis and risk-averse securities.

The asset mix Jan. 1 was 42% stocks, 50% bonds, 8% cash.

The firm follows 75 stocks closely and 100, generally.

C.T. Nilsen is chief investment officer; William Ihlenfeld is client contact.

Capital Research & Management Co.
333 Hope St., Los Angeles, Calif. 90071; (213) 486-9200

Total assets managed	$37,832,000,000
Total discretionary	$37,832,000,000
Total tax-exempt assets	$12,231,000,000
Discretionary tax-exempt	$12,231,000,000
Types of accounts managed	CEFG
Minimum separate account	$20,000,000
No. of portfolio managers	19
Size of research staff	69

Capital Research & Management Co. is an active domestic and international equity and fixed-income, short-term and balanced manager.

Its equity approach is fundamental and value-oriented, based on thorough, detailed research and analysis. Its fixed-income approach is based on interest rate anticipation and maturity, sector and credit analysis.

The firm follows 600 stocks closely and 1,200, generally; 95% of research is generated internally.

The parent is Capital Group Inc.

Jon B. Lovelace is chief investment officer; Victor S. Sidhu is client contact.

Capital Strategy Group Ltd.
700 Loews Landmark Office Bldg., 108 W. Jefferson St., Syracuse, N.Y. 13202; (315) 471-1547

Total assets managed	$30,000,000
Total discretionary	$30,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
International equity assets	$700,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	85
Types of accounts managed	CU
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

Capital Strategy Group Ltd. is an active equity, active bond and balanced manager.

Its primary equity approach is value oriented, using absolute and relative growth valuation methods as compared to alternative investments with long-term time horizons. Options are used.

Its fixed-income approach uses interest rate anticipation, sector analysis and credit analysis/special situation. Managers look for yield pickup in undervalued credit plays.

The asset mix Jan. 1 was 30% stocks, 50% bonds and 20% cash.

Christopher H. DeVoe is chief investment officer; Mac E. Cadaret is client contact.

Capitalcorp Asset Management Inc.
655 Montgomery St., Suite 800, San Francisco, Calif. 94111; (415) 981-4050

Total assets managed	$72,000,000
Total discretionary	$72,000,000
Total tax-exempt assets	$72,000,000
Total discretionary tax-exempt	$72,000,000
Tax-exempt clients	5
Types of accounts managed	CGJ
Minimum separate account	$1,000,000
No. of portfolio managers	2

Capitalcorp Asset Management Inc., an active and passive fixed-income manager, bases its approach on interest rate anticipation.

All assets were in bonds Jan. 1.

The parent is E&L Associates Inc.

Donald De Lutis is chief investment officer; Joan M. Muller is client contact.

Capitoline Investment Services Inc.
919 E. Main St., Richmond, Va. 23219; (804) 782-7222

See entry for CRESTAR BANK.

Cartwright & Goodwin Inc.
291 Broadway, 17th Floor, New York, N.Y. 10007; (212) 267-7795

Total assets managed	$63,000,000
Total discretionary	$25,000,000
Total tax-exempt assets	$63,000,000
Total discretionary tax-exempt	$25,000,000
Tax-exempt clients	3
Types of accounts managed	G
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	4

Cartwright & Goodwin Inc., a quantitative equity manager, creates its own index of 200 stocks.

The firm looks at current and anticipated price trends, quarterly earnings and earnings surprise, current or historical p/es and companies with capitalizations of $100 million or more that are B-quality or better.

All assets were in stocks Jan. 1.

The firm follows 200 stocks closely and 500, generally.

Steve Goodwin is chief investment officer and client contact.

Cashen Investment Advisors
5001 Spring Valley Road, Suite 824 East, Lockbox 32E, Dallas, Texas 75244; (214) 715-1860

Total assets managed	$176,000,000
Total discretionary	$176,000,000
Total tax-exempt assets	$6,000,000
Total discretionary tax-exempt	$6,000,000
Mortgage-backed assets	$3,000,000
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Cashen Investment Advisors Inc. is an active equity, active fixed-income, balanced and short-term manager.

In equities, the firm uses Graham & Dodd analysis, targeting stocks with a history of earnings growth, rising dividends, high profitability, favorable cash flow, low debt and attractive entry price. In fixed income, the firm is a modified sector manager. Portfolios have three common characteristics: moderate-to-high credit quality; good diversification and an intermediate range.

The asset mix Jan. 1 was 10% stocks, 45% bonds and 45% mortgage-backed securities.

Shack B. Cashen is chief investment officer and client contact.

Cashman, Farrell and Associates

1235 Westlakes Drive, Suite 370, Berwyn, Pa. 19312; (215) 889-1500

Total assets managed	$2,296,000,000
Total discretionary	$2,296,000,000
Total tax-exempt assets	$2,296,000,000
Total discretionary tax-exempt	$2,296,000,000
Tax-exempt clients	69
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	5

Cashman, Farrell and Associates is an active equity, active fixed-income and balanced manager.

Its equity approach is value oriented and opportunistic, targeting out-of-favor stocks of sound companies. Its fixed-income approach is intermediate, conservative, avoiding risk and capitalizing on inefficiencies in the markets where they present significant opportunity. Sector and yield curve analysis are used.

The asset mix Jan. 1 was 52% stocks, 39% bonds and 9% cash.

The firm follows 200 stocks closely and 100, generally; 85% of research is generated internally.

Daniel V. Cashman and James H. Farrell are chief investment officers; Dianne Searfoss is client contact.

CB Commercial Realty Advisors

533 Fremont Ave., Los Angeles, Calif. 90071; (213) 613-3511

Total assets managed	$866,000,000
Total discretionary	$701,000,000
Total tax-exempt assets	$866,000,000
Total discretionary tax-exempt	$701,000,000
Equity real estate assets	$568,000,000
Mortgage assets	$35,000,000
Tax-exempt clients	43
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	7
Size of research staff	7

CB Commercial Realty Advisors, formerly Coldwell Banker Commercial Realty Advisors, is a real estate investment manager that provides investment opportunities where capital is preserved and the after-tax return is maximized through research-based underwriting, transaction structure, management and timely disposition of investments.

The asset mix Jan. 1 was 3.9% cash, 81.1% equity real estate, 5% mortgages and 10% receivables.

The parent is CB Commercial Real Estate Group Inc.

Cab Grayson is chief investment officer; Alan J. Beaudette is client contact.

Cedar Hill Associates Inc.

33 N. LaSalle St., Suite 2600, Chicago, Ill. 60602; (312) 641-3161

Total assets managed	$173,000,000
Total discretionary	$173,000,000
Total tax-exempt assets	$109,000,000
Total discretionary tax-exempt	$109,000,000
Tax-exempt clients	14
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	2

Cedar Hill Associates Inc. is an active equity, active bond and balanced manager.

Its equity approach seeks to enhance the results of value investing by taking advantage of the effect interest rate changes have on stock returns. The firm uses systematic, quantitative decision-making.

Its fixed-income approach is based on total return, identifying critical turning points in interest rates.

The asset mix Jan. 1 was 62% stocks, 25% bonds and 13% cash.

All of the research is generated internally.

Joel H. Jastromb is chief investment officer; Jeanette Schreiber is client contact.

Central Bank Denver N.A.

1515 Arapahoe St., Denver, Colo. 80202; (303) 893-3456

Total assets managed	$227,000,000
Total discretionary	$227,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
Mortgage-backed assets	$1,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	75
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	20

Central Bank Denver N.A. is an active and passive equity, active fixed-income, balanced, short-term and tactical asset allocation manager.

Its equity approach uses Graham & Dodd analysis. In fixed income, sector analysis is employed.

The asset mix Jan. 1 was 30% equities, 50% fixed-income, 10% cash, 5% mortgage-backed securities and 5% GICs.

The firm follows 50 stocks closely and 200, generally; 10% of research is generated internally.

The parent is First Bank Systems.

Jan Smedley is chief investment officer; Dan Rich is client contact.

Central Guaranty Trust Co.

335 Bay St., Toronto, Ontario M5H 3N8; (416) 345-4917

Total assets managed	$541,085,000
Total discretionary	$541,085,000
Total tax-exempt	$535,000,000
Total discretionary tax-exempt	$535,000,000
Equity indexed assets	$80,000,000
Tax-exempt clients	235
Types of accounts managed	CE
Size of research staff	7

Central Guaranty Trust Co., a Canadian firm, is an active and passive equity, active bond, balanced and short-term manager.

Its equity approach focuses on value with up to 30% of the portfolio invested in high-value stocks of companies with low equity bases. Portfolios are limited to 20% in any one sector and 6% in any one company. It employs sector rotation, market timing/tactical asset allocation and quantitative techniques.

For fixed income, portfolio duration is determined by the firm's interest rate forecast but is maintained with established parameters relative to an outside index.

The asset mix Jan. 1 was 27% Canadian stocks, 24.1% U.S. stocks, 25.6% bonds, 9% cash and 14.3% money market instruments.

It follows 80 stocks closely and 100, generally; 50% of research is generated internally.

R.K. Weller is client contact.

Central Trust Co.

201 E. Fifth St., Cincinnati, Ohio 45202; (513) 651-8405

Total assets managed	$3,600,000,000
Total discretionary assets	$2,875,000,000
Total tax-exempt assets	$786,000,000
Total discretionary tax-exempt	$520,000,000
Types of accounts managed	CEF
Minimum separate account	$1,000,000

Central Trust Co. is an active equity, active bond, balanced and short-term manager.

Its equity approach focuses on quality core growth stocks, emphasizing strong balance sheets, above-average earnings growth and relative market stability. Its fixed-income approach is based on interest rate anticipation, focusing on quality bonds, especially Treasury securities.

The asset mix Jan. 1 was 64% stocks, 28% bonds and 8% cash.

The bank follows 200 stocks closely.

The parent is PNC Financial.

Walter K. Parker is chief investment officer and client contact.

Certus Financial Corp.

1 Bush St., Suite 450, San Francisco, Calif. 94104; (415) 954-1950

Total assets managed	$3,100,000,000
Total discretionary	$3,100,000,000
Total tax-exempt assets	$3,100,000,000
Total discretionary tax-exempt	$3,100,000,000
401(k)/457 assets managed	$3,100,000,000
Tax-exempt clients	35
Types of accounts managed	CG
Minimum separate account	$25,000,000
No. of portfolio managers	2
Size of research staff	4

Certus Financial Corp., a GIC/BIC manager, uses active management techniques on portfolios.

All assets were in GICs/BICs Jan. 1.

David M. Perry is chief investment officer and client contact.

Chancellor Capital Management

153 E. 53rd St., New York, N.Y. 10022; (212) 891-6500

Total assets managed	$18,609,000,000
Total discretionary	$18,417,000,000
Total tax-exempt assets	$13,482,000,000
Discretionary tax-exempt	$13,482,000,000
International equity assets	$22,000,000
Equity indexed assets	$969,000,000
Fixed-income indexed assets	$140,000,000
Dedicated/immunized assets	$8,890,000
Mortgage-backed assets	$700,000,000
401(k)/457 assets managed	$3,623,000,000
Tax-exempt clients	210
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	35
Size of research staff	21

Chancellor Capital Management is an active and passive equity and fixed-income, balanced, passive international equity, tactical asset allocation, short-term cash, senior secured bank loans, venture capital, LBO and special situations manager.

Its primary equity approach is growth oriented. The firm seeks large-cap growth companies with positive fundamental change and compelling values. It uses options and stock index futures.

Its primary fixed-income approach is equally driven by interest rate anticipation and sector rotation, which seek to provide superior absolute and relative rates of return consistent with client objectives.

Real estate investments are made in securities of REITs, commercial developers, community developers and land-rich companies.

The asset mix Jan. 1 was 38% stocks, 18% bonds, 39% cash and 5% mortgage-backed securities.

The firm follows 500 stocks closely and 900, generally; 75% of research is generated internally.

The parent is USF&G Financial Services Corp.

Robert G. Wade is chief investment officer; Joseph W. Haley is client contact.

Charles River Management

21 Merchants Row, Boston, Mass. 02109; (617) 248-3950

Total assets managed	$200,000,000
Total discretionary	$200,000,000
Total tax-exempt assets	$200,000,000
Total discretionary tax-exempt	$200,000,000
Tax-exempt clients	2
Types of accounts managed	CF
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	1

Charles River Management Co. Inc. is an active intermediate fixed-income and short-term manager.

For fixed income, the firm uses top-down fundamental economic analysis to determine rate trends and reacts to exploit the trends rather than anticipating them.

The asset mix Jan. 1 was 95% fixed income and 5% cash.

Vincent T. Matteucci is chief investment officer; Richard Lombardi II is client contact.

Chase Investment Counsel

300 Preston Ave., Suite 403, Charlottesville, Va. 22901; (804) 293-9104

Total assets managed	$241,000,000
Total discretionary	$241,000,000
Total tax-exempt assets	$168,000,000
Total discretionary tax-exempt	$168,000,000
Tax-exempt clients	11
Types of accounts managed	CEFJ
Minimum separate account	$3,000,000
No. of portfolio managers	2
Size of research staff	2

Chase Investment Counsel Corp. is an active equity and balanced manager.

Its equity approach stresses undervalued, low p/e growth stocks with good continuity of earnings and intermediate market capitalization. Its fixed-income approach uses interest rate anticipation with a short- to intermediate-term orientation.

The asset mix Jan. 1 was 59% stocks, 35% bonds and 6% cash.

Derwood S. Chase Jr. is chief investment officer; Robert J. King is client contact.

Fastest growing managers: July 8.

25 largest GIC providers

Firm	$ mils.*
Prudential Asset	21,452
Metropolitan Life	16,700
Aetna Life	12,462
Equitable Life	10,000
John Hancock	9,746
Travelers	8,439
New York Life	8,248
Provident Nat'l	6,658
Massachusetts Mutual	4,805
Continental Assururance	4,531
State Mutual	4,037
Principal Financial	3,500
Hartford Life	3,442
Pacific Mutual	3,182
Allstate Life	3,068
Connecticut Mutual	2,571
MONY	2,550
Confederation Life	2,396
NWNL	2,080
Great-West Life	1,824
CIGNA	1,728
Lincoln Nat'l	1,567
Manulife Financial	1,532
The New England	1,446
Mutual Benefit	1,370
Total	**139,334**

*Discretionary tax-exempt assets

Chase Investors Management Corp.

1211 Avenue of the Americas, New York, N.Y. 10036; (212) 789-7300

Total assets managed	$34,298,000,000
Total discretionary	$28,283,000,000
Total tax-exempt assets	$19,393,000,000
Discretionary tax-exempt	$19,042,000,000
Equity real estate assets	$131,000,000
International equity assets	$1,037,000,000
International fixed-income	$36,000,000
International cash assets	$170,000,000
Equity indexed assets	$1,528,000,000
Fixed-income indexed assets	$450,000,000
Dedicated/immunized assets	$1,218,000,000
Mortgage-backed assets	$132,000,000
401(k)/457 assets managed	$467,000,000
Tax-exempt clients	125
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	43

Chase Investors Management Corp. offers management of active and passive equity and fixed-income accounts domestically and internationally, as well as balanced, currency, oil and gas, and real estate accounts.

Its equity approaches include growth, emerging growth, value and passive. The firm offers a full spectrum of investment opportunities across market capitalization segments. Its fixed-income approach focuses on customized investment strategies in sector specialties: enhanced cash; short-intermediate, intermediate, long maturities; securitized mortgages; high yield; indexation; and various hedging and immunization strategies. It uses options and financial futures.

Its real estate approach emphasizes acquisitions and active management of high-quality U.S. income-producing properties in major metropolitan centers.

The firm runs $706 million in U.S. tax-exempt discretionary assets in currency hedging and domestic derivative overlay strategies. All of the underlying assets are managed internally.

The asset mix Jan. 1 was 19% stocks, 13% bonds, 55% cash, 1% equity real estate, 1% mortgage-backed securities, 4% oil and gas, 3% currency and 4% other.

The firm follows 500 stocks closely and 600, generally; 75% of the research is generated internally.

The parent is The Chase Manhattan Corp.

Michael L. Schonberg is chief investment officer; Kinne S. Yon is client contact.

Cheswick Investment Co.

1 Pickwick Plaza, P.O. Box 2591, Greenwich, Conn. 06836; (203) 869-3600

Total assets managed	$360,000,000
Total discretionary	$360,000,000
Total tax-exempt assets	$35,000,000
Total discretionary tax-exempt	$35,000,000
Tax-exempt clients	5
Types of accounts managed	CEF
Minimum separate account	$15,000,000
No. of portfolio managers	1

Cheswick Investment Co. Inc. is an active equity and balanced manager.

The dominant equity style is to emphasize high-quality growth companies and to stay with them until there are ominous signs of a general price decline or the issues appear to be losing either price or earnings momentum. Investments also are made, in a disciplined manner, in smaller growth companies.

Its bond approach is to invest in U.S. Treasury obligations only and to alter maturity schedules as warranted by credit cycle forecasts.

The asset mix Jan. 1 was 50% stocks, 48% bonds and 2% cash.

The firm follows 25 stocks closely and 25, generally.

Richard R. Cheswick is chief investment officer and client contact.

The Chicago Corp.

208 S. LaSalle St., Chicago, Ill. 60604; (312) 855-5985

Total assets managed	$1,507,000,000
Total discretionary	$1,507,000,000
Total tax-exempt assets	$1,232,000,000
Total discretionary tax-exempt	$1,232,000,000
401(k)/457 assets managed	$30,000,000
Tax-exempt clients	103
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	12

The Chicago Corp. is an active equity, active fixed-income and balanced manager.

Its primary equity approach stresses stocks with consistent growth over an economic cycle that sell at undervalued multiples. Its primary fixed-income approach uses interest rate anticipation. Long bonds are bought when interest rates are declining.

The asset mix Jan. 1 was 70% stocks, 22% bonds and 8% cash.

Jon Ender is chief investment officer; Charles Kimkowski is client contact.

Chicago Asset Management

11 S. LaSalle St., Suite 2800, Chicago, Ill. 60603; (312) 372-7469

Total assets managed	$785,000,000
Total discretionary	$785,000,000
Total tax-exempt assets	$785,000,000
Total discretionary tax-exempt	$785,000,000
Mortgage-backed assets	$63,000,000
Tax-exempt clients	32
Types of accounts managed	CJ
Minimum separate account	$15,000,000
No. of portfolio managers	4

Chicago Asset Management Co. is an active equity, active fixed-income and balanced manager.

Its equity approach is value oriented, bottom-up and contrarian, distinguished by a "rebalancing" technique. Its fixed-income approach is predicated on a controlled risk strategy that reduces dependence on interest rate anticipation, while emphasizing value added through sector rotation and yield curve analysis.

The firm follows 30 stocks closely and 70, generally; 10% of the research is generated internally.

The parent is United Asset Management.

Jon F. Holsteen is chief investment officer and client contact.

Chicago Title & Trust Co.-Investment Management

111 W. Washington St., Chicago, Ill. 60602; (312) 630-2868

Total assets managed	$3,687,000,000
Total discretionary	$2,887,000,000
Total tax-exempt assets	$1,429,000,000
Total discretionary tax-exempt	$1,429,000,000
Mortgage-backed assets	$55,000,000
401(k)/457 assets managed	$374,000,000
Tax-exempt clients	256
Types of accounts managed	CEFJ
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	7

Chicago Title & Trust Co.-Investment Management is an active equity, active fixed-income, balanced, short-term and GIC manager.

Its primary equity approach is quantitative, emphasizing bottom-up, long-term value stock selection. The firm concentrates on securities analysis.

Its primary fixed-income approach emphasizes management toward a market reference point to enhance returns via security and sector swapping and credit analysis.

The asset mix Jan. 1 was 29% stocks; 21% bonds; 25% cash; 4% mortgage-backed securities; and 21% GICs.

The firm follows 80 stocks closely and 250, generally; 50% of the research is generated internally.

The parent is Alleghany Corp.

A. Vincent Agnew is chief investment officer; Dan Joyce is client contact.

Chrysalis Investments Inc.

University Place, Suite 200, 124 Mount Auburn St., Cambridge, Mass. 01742; (617) 576-5727

Total assets managed	$3,000,000
Total discretionary	$3,000,000
Total tax-exempt assets	$413,000
Total discretionary tax-exempt	$413,000
Tax-exempt clients	11
Types of accounts managed	J
Minimum separate account	$200,000
No. of portfolio managers	1
Size of research staff	1

Chrysalis Investments Inc., an active equity manager, delineates the efficient and inefficient components in the market pricing mechanism and uses proprietary models to forecast the market price envelope.

The asset mix Jan. 1 was 99.1% stocks, 0.9% cash.

The firm follows 200 stocks closely and 1,700, generally; all research is generated internally.

Dean L. Jacoby is chief investment officer and client contact.

Churchill Management Corp.

5900 Wilshire Blvd., Suite 600, Los Angeles, Calif. 90036; (213) 937-7110

Total assets managed	$180,000,000
Total discretionary	$180,000,000
Total tax-exempt assets	$100,000,000
Total discretionary tax-exempt	$100,000,000
Equity real estate assets	$10,000,000
Mortgage assets	$20,000,000
Tax-exempt clients	50
Types of accounts managed	CF
Minimum separate account	$2,000,000
No. of portfolio managers	3
Size of research staff	4

Churchill Management Corp. is a balanced, real estate and trust deed manager.

Its equity approach combines growth and low p/e stocks and market timing. Its fixed-income approach bases maturity lengths on intermediate-term forecasts. Its real estate approach is to establish limited partnerships of high-quality investments using non-leveraged properties.

The asset mix Jan. 1 was 40% stocks, 25% bonds, 5% cash, 10% equity real estate and 20% mortgages.

The firm follows 50 stocks closely and 100, generally; all research is generated internally.

Fred A. Fern is chief investment officer; Steven Mann is client contact.

CIC Asset Management Inc.

800 W. Sixth St., Suite 450, Los Angeles, Calif. 90017; (213) 629-0451

Total assets managed	$60,000,000
Total discretionary	$60,000,000
Total tax-exempt assets	$53,000,000
Total discretionary tax-exempt	$53,000,000
401(k)/457 assets managed	$25,000
Tax-exempt clients	3
Types of accounts managed	CG
Minimum separate account	$500,000
No. of portfolio managers	1
Size of research staff	2

CIC Asset Management Inc. is an active equity and balanced manager.

Its equity approach is based on Graham & Dodd principles. CIC buys quality companies at attractive prices, using a combination of quantitative and qualitative analysis to structure portfolios with long-term appreciation potential. Portfolios will have a lower p/e and a higher dividend yield than the S&P 500.

The asset mix Jan. 1 was 85% stocks and 15% cash.

The firm follows 75 to 100 stocks closely and 500, generally; 50% of the research is generated internally.

Joe D. Campa is chief investment officer; Jorge Castro is client contact.

CIGNA International Investment Advisors Corp.

c/o CIGNA Investments Inc., Hartford, Conn. 06152; (203) 726-6000

See entry for CIGNA INVESTMENTS INC.

CIGNA Investments Inc.

Hartford, Conn. 06152; (203) 726-6000

Total assets managed	$54,293,000,000
Total discretionary assets	$31,466,000,000
Total tax-exempt assets	$26,459,000,000
Discretionary tax-exempt	$28,409,000,000
GICs	$1,728,000,000
Annuities	$1,218,000,000
Equity real estate assets	$1,783,000,000

Mortgage assets	$10,796,000,000
International equity assets	$245,000,000
International fixed-income	$32,000,000
Equity indexed assets	$329,000,000
Fixed-income indexed assets	$33,000,000
Dedicated/immunized assets	$5,201,000,000
401(k)/457 assets managed	$3,690,000,000
Tax-exempt clients	661
Types of accounts managed	CEFG
Minimum separate equity account	$10,000,000
Minimum separate bond account	$20,000,000
No. of portfolio managers	33
Size of research staff	17

CIGNA Investments Inc. is an active and passive domestic equity, active and passive domestic bond, balanced, real estate, active international stock and bond, short-term, tactical asset allocation, high-yield and private placements manager.

Its domestic equity approach is value-oriented, balancing earnings growth and value. Research-based fundamental analysis identifies stocks with superior value and return potential over the long term. Stock index futures are used in the commingled stock index fund. Options also are used.

Its fixed-income approach emphasizes active management fee of portfolio duration. Returns are further enhanced through sector and quality rotation and fundamental credit analysis.

In real estate, it focuses on opportunities created by property life cycles. Diversified and specialized portfolios and single-asset investments are structured to take advantage of risk and return trade-offs.

The separate account asset mix Jan. 1 was 24% stocks, 44% bonds, 8% cash and 24% equity real estate.

The insurer follows 200 stocks closely and 600, generally; 75% of research is generated internally.

The parent is CIGNA Corp.

George R. Trumbull is chief investment officer; David P. Marks is client contact.

The assets of these subsidiaries are included in the listing above:

CIGNA International Investment Advisors Corp., London, manages $280 million in U.S. tax-exempt assets. The equity approach is top-down, actively allocating assets to countries/sectors based on their macroeconomic outlook. Liquid, high-quality stocks are selected for sustainable growth and low volatility. Currency is a factor in determining country/cash allocations. Weightings may vary significantly from EAFE. The fixed-income approach is top down, with horizon analysis used to determine maturity/duration allocation. Active currency management is employed.

Laurie M. LeBlanc is the client contact.

Connecticut General Pension Services Inc. provides asset allocation services to more than 350 retirement plans representing more than $3 billion in tax-exempt assets.

Rosemary S. Cleaves is the client contact.

CIMG Inc.

P.O. Box 17500, Milwaukee, Wis. 53217; (414) 241-6100

Total assets managed	$129,000,000
Total discretionary	$129,000,000
Total tax-exempt assets	$69,000,000
Total discretionary tax-exempt	$69,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	77
Types of accounts managed	CEFG
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	1

CIMG Inc. is an active bond and balanced manager.

Its equity approach uses sector rotation and market timing/tactical asset allocation. Equities are concentrated in market sectors benefiting from the current market cycle. Its fixed-income approach uses interest rate anticipation in government securities. Average maturities range from two to 25 years.

The asset mix Jan. 1 was 25% stocks, 10% bonds and 65% cash.

The firm follows 75 stocks closely and 150, generally; 35% of the research is generated internally.

Louis T. Chambers is chief investment officer and client contact.

Citibank Investment Management

641 Lexington Ave., Fourth Floor, New York, N.Y. 10043; (212) 559-9004

Total assets managed	$31,629,000,000
Total discretionary	$22,492,000,000
Total tax-exempt assets	$732,000,000
Total discretionary tax-exempt	$732,000,000
Equity real estate assets	$334,000,000
Mortgage assets	$74,000,000
International equity assets	$266,000,000
International fixed-income	$19,000,000
International cash assets	$40,000,000
Tax-exempt clients	50
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	47
Size of research staff	3

Citibank Investment Management is an active and passive international/global equity, active international/global fixed-income, short-term, currency overlay and real estate manager.

It follows an active, top-down equity approach with a growth bias, a model-driven currency overlay, a screening approach to stock selection and a minimal holding of significant cash positions. Its fixed-income approach is active, with a centralized country allocation process and an emphasis on currency and duration management. It uses options and fixed-income futures.

Its real estate approach is to acquire properties with moderate risk characteristics and potential for above-average income and capital appreciation in locations where market values are substantially below fair market value because of current illiquidity in the markets.

The asset mix Jan. 1 was 36.4% stocks, 2.6% bonds, 5.4% cash, 45.6% equity real estate and 10% mortgages.

The firm follows 400 stocks closely and 700, generally; 50% of the research is generated internally.

The parent is Citicorp.

Philip Sherman is chief investment officer; Carolyn A. Peoples is client contact.

Citizens and Southern Trust Co. (Georgia) N.A.

33 North Ave., Atlanta, Ga. 30308; (404) 897-3081

See entry for C&S/SOVRAN TRUST CO.

Citizens and Southern Trust Co. (South Carolina) N.A.

295 Greystone Blvd., Columbia, S.C. 29222; (803) 765-8572

See entry for C&S/SOVRAN TRUST CO.

City Capital Counseling

1 Midtown Plaza, Suite 1110, 1360 Peachtree St., Atlanta, Ga. 30309; (404) 874-1110

Total assets managed	$251,000,000
Total discretionary	$251,000,000
Total tax-exempt assets	$50,000,000
Total discretionary tax-exempt	$50,000,000
Mortgage-backed assets	$30,000,000
Tax-exempt clients	10
Types of accounts managed	CF
Minimum separate account	$1,000,000
No. of portfolio managers	4

City Capital Counseling, formerly Atlanta Capital Counseling, is an active equity, active bond and balanced manager.

Its equity investment decision-making process is based on the principle that in the long term, the growth in stock prices has a high correlation with dividend growth.

The fixed-income forecasting methodology is based primarily on the analysis of inflation and interest rate forecasts. Using a weighted average technique, this enables the firm to evaluate multiple forecasts.

The asset mix Jan. 1 was 40% stocks and 60% mortgage-backed securities.

The firm follows 30 stocks closely and 50, generally; half of the research is generated internally.

Allen W. Post Jr. is chief investment officer; Hunter W. Groton is client contact.

Clean Yield Asset Management Inc.

224 State St., Portsmouth, N.H. 03801; (603) 436-0820

Total assets managed	$8,000,000
Total discretionary	$8,000,000
Total tax-exempt assets	$1,000,000
Total discretionary tax-exempt	$1,000,000
401(k)/457 assets managed	$600,000
Tax-exempt clients	5
Types of accounts managed	CEF
Minimum separate account	$150,000
No. of portfolio managers	3
Size of research staff	1

Clean Yield Asset Management Inc., an active equity and balanced manager, specializes in socially responsible investing. Investments are based on fundamentals, with technical analysis used in timing buy/sell decisions.

The asset mix Jan. 1 was 54% stocks, 5% bonds and 41% cash.

The firm follows 100 stocks closely and 300, generally; 80% of the research is generated internally.

The parent is The Clean Yield Group Inc.

Benjamin Lovell is chief investment officer and client contact.

CMB Investment Counselors

1880 Century Park East, Suite 600, Los Angeles, Calif. 90067; (213) 557-1500

Total assets managed	$2,982,000,000
Total discretionary	$2,964,000,000
Total tax-exempt assets	$637,000,000
Total discretionary tax-exempt	$637,000,000
Mortgage-backed assets	$68,000,000
Tax-exempt clients	17
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	5

CMB Investment Counselors is an active equity, active fixed-income, balanced and international/global equity manager.

Its primary equity approach is fundamental, bottom-up stock selection, which emphasizes good relative value among stocks with strong sales and earnings momentum across six categories: major growth, moderate growth, developing growth, credit cyclical, cyclical value and asset value.

Its fixed-income approach is value-oriented, using sector analysis to find broad areas of undervaluation among government, corporate and mortgage pass-through securities.

Financial futures are used.

The asset mix Jan. 1 was 57.8% stocks, 17.8% bonds, 12.5% cash and 11.9% mortgage-backed securities.

The firm follows 200 stocks closely and 100, generally; 50% of the research is generated internally.

The parent is Meridian Global Funds Management.

Richard S. Aberle is chief investment officer; Gordon C. Coomans is client contact.

Cohen, Davis & Marks Inc.

2112 Broadway, Suite 314, New York, N.Y. 10023; (212) 799-4880

Total assets managed	$25,000,000
Total discretionary	$25,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Cohen, Davis & Marks Inc., an active equity manager, follows a disciplined, top-down, value approach, based on established portfolio theory and supported by sophisticated technology. Classical analysis, focused on macroeconomic expectations, determines portfolio structure; fundamental analysis determines stock selection; and quantitative systems support the process.

The asset mix Jan. 1 was 100% stocks.

The firm follows 1,500 stocks closely and 1,500, generally; all research is generated internally.

George M. Cohen is chief investment officer; John Spiezia is client contact.

Cohen & Steers Capital Management Inc.

757 Third Ave., New York, N.Y. 10017; (212) 832-3232

Total assets managed	$194,000,000
Total discretionary	$194,000,000
Total tax-exempt assets	$149,000,000
Total discretionary tax-exempt	$149,000,000
Tax-exempt clients	8
Types of accounts managed	CEG
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	1

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A division of The Bank of California
Greg King, Senior Vice President
800 Wilshire Boulevard, Los Angeles, California 90017
Telephone 213/621-1393

Cohen & Steers Capital Management Inc. manages portfolios of real estate securities for institutional investors and mutual funds. Securities are purchased based upon the manager's assessment of the underlying real estate values and dividend growth potential.

The asset mix Jan. 1 was 100% real estate securities.

The firm follows 75 stocks closely and 200, generally; 90% of the research is generated internally.

Martin Cohen is chief investment officer; Robert Steers is client contact.

Collins Associates

840 Newport Center Drive, Suite 660, Newport Beach, Calif. 92660; (714) 644-5771

Total assets managed	$2,500,000,000
Assigned to other firms	$2,500,000,000
Discretionary tax-exempt	$2,250,000,000
Size of research staff	10

Collins Associates, a manager of managers, is responsible for tax-exempt assets in equity, fixed-income, balanced, international, real estate and GIC accounts. The assets are managed on its behalf by external managers.

Budge Collins, is chief investment officer and client contact.

Colorado Capital Advisors

950 17th St., Suite 2450, Denver, Colo. 80202; (303) 892-4235

Total assets managed	$1,200,000,000
Total discretionary	$1,200,000,000
Total tax-exempt assets	$520,000,000
Total discretionary tax-exempt	$520,000,000
401(k)/457 assets managed	$53,000,000
Tax-exempt clients	110
Types of accounts managed	CEF
Minimum separate account	$2,000,000
No. of portfolio managers	8

Colorado Capital Advisors is an active equity, active bond and balanced manager.

It uses a value-oriented, risk-averse equity approach to identify high-quality companies that pay cash dividends and are attractively priced.

Its fixed-income approach seeks opportunity in maturity and sector changes.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

The parent is Colorado National Bank of Denver.

Robert J. Alder is chief investment officer; Scott Chambers is client contact.

Columbia Management Co.

1300 S.W. Sixth Ave., P.O. Box 1350, Portland, Ore. 97207; (503) 222-3600

Total assets managed	$7,845,000,000
Total discretionary	$5,353,000,000
Total tax-exempt assets	$5,353,000,000
Total discretionary tax-exempt	$5,353,000,000
Dedicated/immunized assets	$123,000,000
401(k)/457 assets managed	$400,000,000
Tax-exempt clients	81
Types of accounts managed	CEFGJ
Minimum separate account	$20,000,000
No. of portfolio managers	12

Columbia Management Co. is an active equity, active fixed-income and balanced manager.

Its primary equity approach is top-down and value-oriented, using sector rotation. Its fixed-income approach, involving sector analysis, focuses on structuring and actively managing high-quality intermediate-term portfolios with an emphasis on mortgage-backed/asset-backed securities.

The asset mix Jan. 1 was 64% stocks, 30% bonds and 6% cash.

The firm follows 200 stocks closely and 3,000, generally; 25% of research is generated internally.

James F. Rippey is chief investment officer; Stephen C. Haas is client contact.

Columbus Bank & Trust Co.

P.O. Box 120, Columbus, Ga. 31902; (404) 649-2433

Total assets managed	$634,000,000
Total discretionary assets	$631,000,000
Total tax-exempt assets	$121,000,000
Total discretionary tax-exempt	$121,000,000
Mortgage assets	$6,000,000
Mortgage-backed assets	$6,000,000
401(k)/457 plan assets	$1,000,000
Tax-exempt clients	235
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Columbus Bank & Trust Co. is an active equity, active fixed-income and balanced manager.

Its equity approach stresses undervalued growth potential, strong cash flow and low relative p/es with a bias toward high-quality, large and midsize companies. In fixed income, it uses intermediate maturities and limited duration adjustment, and sector and yield-curve analysis. Options and financial future are used.

The asset mix Jan. 1 was 30% stocks, 35% bonds, 5% cash, 5% mortgages, 5% mortgage-backed securities and 20% GICs.

The bank follows 100 stocks closely and 300, generally; 30% of research is generated internally.

The parent is Synovus Financial Corp.

Danny Hobbs is chief investment officer; Joseph M. Lowery is client contact.

P&I will take a look at the largest non-U.S. managers Sept. 30.

Columbus Circle Investors

1 Station Place, Metro Center, Stamford, Conn. 06902; (203) 353-6000

Total assets managed	$3,805,000,000
Total discretionary	$3,805,000,000
Total tax-exempt assets	$2,592,000,000
Total discretionary tax-exempt	$2,592,000,000
401(k)/457 assets managed	$28,000,000
Tax-exempt clients	97
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	6

Columbus Circle Investors is an active equity and fixed-income and balanced manager.

Its primary equity approach uses growth stocks and sector rotation, seeking companies whose essential story elements are exceeding expectations and demonstrating positive momentum and surprise. Options are used.

Its primary fixed-income approach uses interest rate anticipation and sector analysis, focusing on factors affecting maturity and quality.

The asset mix Jan. 1 was 79% stocks, 10% bonds and 11% cash.

The firm follows 100 stocks closely and 850, generally.

The parent is Thomson Advisory Group.

Irwin F. Smith is chief investment officer; Robert W. Fehrmann is client contact.

Commerce Bank

P.O. Box 419248, Kansas City, Mo. 64141; (816) 234-2000

Total assets managed	$3,379,000,000
Total discretionary assets	$3,379,000,000
Total tax-exempt assets	$997,000,000
Total discretionary tax-exempt	$997,000,000
401(k)/457 plan assets	$361,000,000
Tax-exempt clients	568
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	17

Commerce Bank is an active equity and bond, balanced, short-term, tactical asset allocation and GIC manager.

Its equity approach emphasizes companies with above average return on equity, earnings and dividend growth; strong financials; and innovative management. These core holdings are combined with stocks representing exceptional opportunities. Options are used.

Its fixed-income approach is systematic, disciplined and consistent. It is quantitative and uses no forecasting.

The asset mix Jan. 1 was 30% stocks, 60% bonds and 10% cash.

The bank follows 60 stocks closely and 600, generally; 25% of research is generated internally.

The parent is Commerce Bancshares.

Thomas Welford and Gary Campbell are chief investment officers; Craig W. Huntley is client contact.

The Common Fund

P.O. Box 940, 363 Reef Road, Fairfield, Conn. 06430; (203) 255-7000

The Common Fund is a manager of managers; $11.682 billion in discretionary tax-exempt assets are managed on its behalf by external managers.

Equity, fixed-income, balanced and international management is offered through the external managers.

Its equity approach employs commingled programs that use multiple investment techniques, including emerging growth, growth and low p/e stocks; Graham & Dodd and quantitative analysis; market timing; and country selection. Fixed-income approaches include interest rate anticipation, sector analysis and country selection.

George Keane is chief investment officer; David Storrs is client contact.

Composite Research & Management Co.

1201 Third Ave., Suite 1220, Seattle, Wash. 98101; (206) 461-3800

Total assets managed	$1,167,000,000
Total discretionary	$1,167,000,000
Total tax-exempt assets	$325,000,000
Total discretionary tax-exempt	$325,000,000
Mortgage-backed assets	$65,000,000
401(k)/457 assets managed	$36,000,000
Tax-exempt clients	38
Types of accounts managed	CEFJ
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	1

Composite Research & Management Co. is an active and passive equity, active fixed-income, balanced and short-term manager.

Its equity approach focuses on intrinsic value, confined to high-quality low p/e stocks. The bottom-up, fundamental research process looks for companies with net free cash flow, low debt leverage and above-average return on capital. Its fixed-income approach is duration constrained and emphasizes economic analysis, quantitative analysis (including sector work) and credit analysis.

The asset mix Jan. 1 was 15% equities, 51% bonds and 14% cash and 20% mortgage-backed

We're changing the way

securities.

The firm follows 60 stocks closely and 120, generally.

The parent is Washington Mutual Financial Group.

Kenneth Carlson is client contact.

Computime Institutional Services Inc.

300 Mercer St., Suite 20E, New York, N.Y. 10003; (212) 777-9494

Total assets managed	$46,000,000
Total discretionary	$33,000,000
Total tax-exempt assets	$20,000,000
Total discretionary tax-exempt	$20,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	3

Computime Institutional Services Inc. is an active and passive equity and tactical asset allocation manager.

A proprietary quantitative market model determines the extent of equity exposure. Proprietary rankings for sectors and stocks are used. Options and stock index futures also are used.

All assets were in stocks Jan. 1.

All research is generated internally.

David M. Levin is chief investment officer and client contact.

Compu-Val Investments Inc.

1702 Lovering Ave., Wimington, Del. 19806; (302) 652-6767

Total assets managed	$299,000,000
Total discretionary	$299,000,000
Total tax-exempt assets	$148,000,000
Total discretionary tax-exempt	$148,000,000
Tax-exempt clients	265
Types of accounts managed	CFG
Minimum separate account	$250,000
Size of research staff	5

Compu-Val Investments Inc. is an active equity and passive bond manager.

Its equity approach focuses on value, emphasizing low p/e stocks and using Graham & Dodd analysis.

The asset mix Jan. 1 was 77.7% stocks, 10.6% bonds and 11.7% cash.

The firm follows 60 stocks closely and 1,000, generally; all research is generated internally.

James Kalil is chief investment officer; Donald J. Kalil is client contact.

Concord Capital Management

2800 Campus Drive, Suite 100, San Mateo, Calif. 94403; (415) 572-0400

Total assets managed	$1,565,000,000
Total discretionary	$1,428,000,000
Total tax-exempt assets	$1,565,000,000
Total discretionary tax-exempt	$1,428,000,000
Tax-exempt clients	27
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
Size of research staff	5

Concord Capital Management, an active equity manager, takes a contrarian approach, developing themes and identifying groups of stocks believed to be undervalued.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 100 stocks closely and 1,000, generally; 75% of research is generated internally.

Harold L. Arbit is chief investment officer; Edward D. Maltz Jr. is client contact.

Confed Investment Counselling Ltd.

321 Bloor St. E., Toronto, Ontario M4W 1H1; (416) 323-8070

Total assets managed	$4,088,000,000
Total discretionary	$3,877,000,000
Total tax-exempt	$4,088,000,000
Total discretionary tax-exempt	$3,877,000,000
Equity real estate assets	$427,000,000
Non-North American equities	$78,000,000
Tax-exempt clients	614
Minimum separate account	$20,000,000
No. of portfolio managers	8
Size of research staff	6

Confed Investment Counselling Ltd., a Canadian firm, is an active domestic and international equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach emphasizes fundamental value by investing in well-managed companies with a sound history of financial performance. Its fixed-income approach seeks to enhance returns through trading and structural management given the expected level and direction of interest rates.

Its real estate approach is value-oriented, seeking high-quality, income-producing properties adequately diversified by location, property type and tenant.

The asset mix Jan. 1 was 31% Canadian stocks, 8% U.S. stocks, 38% bonds, 10% cash, 11% equity real estate and 2% international stocks.

It follows 250 stocks closely and 500, generally; 75% of research is generated internally.

The parent is Confederation Life Insurance Co.

John Watson is chief investment officer; Frank Ryan is client contact.

Confederation Life Insurance Co.

P.O. Box 105103, Atlanta, Ga. 30348; (404) 953-5100

Total assets managed	$2,509,000,000
Total discretionary assets	$2,505,000,000
Total tax-exempt assets	$2,509,000,000
Total discretionary tax-exempt	$2,505,000,000
GICs	$2,396,000,000
Annuities	$26,000,000
International equity assets	$6,000,000
401(k)/457 assets managed	$2,350,000,000
Tax-exempt clients	1,944
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	10

Confederation Life Insurance Co. is an active equity, active fixed-income and balanced manager.

Its primary equity approach emphasizes fundamental value and diversification, investing in deeply undervalued securities based on long-term considerations. Its primary fixed-income approach uses interest rate anticipation to determine duration levels and trading to enhance returns.

The separate account asset mix Jan. 1 was 31.3% stocks, 47.4% bonds, 12.7% cash and 8.6% international stocks.

Seventy-five percent of the research is generated internally.

J. Clive Curtis is chief investment officer; Hubert Atkinson is client contact.

Connecticut General Pension Services

c/o CIGNA Investments Inc., Hartford, Conn. 06152; (203) 726-6000

See entry for CIGNA INVESTMENTS INC.

Connecticut Investment Management Inc.

P.O. Box 877, CIM Bldg., 172 Brush Hill Road, Old Lyme, Conn. 06371; (203) 434-9700

Total assets managed	$131,000,000
Total discretionary	$131,000,000
Total tax-exempt assets	$9,000,000
Total discretionary tax-exempt	$9,000,000
Tax-exempt clients	5
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	3

Connecticut Investment Management Inc. is an active equity and balanced manager.

Its growth stock investment style uses a bottom-up approach to medium- to large-cap U.S. equities with strong fundamentals and histories of consistent, above-average earnings growth.

Its fixed-income approach is passive, using U.S. government and agency paper with laddered maturities out to 10 years.

The asset mix Jan. 1 was 60% stocks, 35% bonds and 5% cash.

The firm follows 100 stocks closely and 300, generally; 30% of research is generated internally.

Richard L. Foote is chief investment officer; Mr. Foote and Gerald A. Long are client contacts.

Connecticut Mutual Life Insurance Co.

140 Garden St., Hartford, Conn. 06054; (203) 727-6500

Total assets managed	$11,754,000,000
Total discretionary assets	$2,961,000,000
Total tax-exempt assets	$2,961,000,000
Total discretionary tax-exempt	$2,961,000,000
GICs	$2,571,000,000
International equity assets	$12,000,000
Tax-exempt clients	4,965
Types of accounts managed	CG
No. of portfolio managers	15

Connecticut Mutual Life Insurance Co. is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Two equity approaches are offered: Rotational, using a top-down, fundamental investment process; and low p/e combined with achieved earnings in excess of expectations. Options are used. Fixed-income approaches focus on four areas: Treasuries, investment-grade issues, high-yields and convertibles.

Pooled separate accounts, managed by external investment advisers, total an additional $154 million.

The separate account asset mix Jan. 1 was 40% stocks, 47% bonds and 13% cash.

Maureen Ford is client contact.

Connecticut National Bank

777 Main St., Hartford, Conn. 06115; (203) 728-4399

Total assets managed	$12,928,000,000
Total discretionary assets	$8,926,000,000
Total tax-exempt assets	$4,328,000,000
Total discretionary tax-exempt	$1,862,000,000
Mortgage assets	$617,000
Equity indexed assets	$20,000,000
401(k)/457 plan assets	$610,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	26
Size of research staff	8

Connecticut National Bank is an active and passive equity, balanced, short-term and GIC manager.

The bank has three equity styles: Growth emphasizes above-average growth in all capitalization sizes; growth and income has a yield tilt; and

the world trades.

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special equity focuses on small-cap investing.

It also has three fixed-income approaches: Total return uses all maturities; intermediate stipulates a 10-year maximum; and limited maturity has a three-year maximum effective maturity.

The asset mix Jan. 1 was 42.8% stocks, 30.5% bonds, 25.8% cash and 0.9% miscellaneous assets.

The bank follows 100 stocks closely and 250, generally; 75% of research is generated internally.

The parent is Shawmut National Corp.

Rudolph Abel is chief investment officer; Roger A. Lawson is client contact.

Connors Investors Services

1100 Berkshire Blvd., Suite 300, Wyomissing, Pa. 19610; (215) 376-7418

Total assets managed	$143,000,000
Total discretionary	$110,000,000
Total tax-exempt assets	$86,000,000
Total discretionary tax-exempt	$53,000,000
Tax-exempt clients	66
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	1

Connors Investors Services Inc. is an active and passive equity, passive fixed-income, balanced and covered option writing manager.

Covered option writing and small growth stocks are the firm's specialties. Hedged positions are selected after a series of screens to identify strong fundamentals, low variability and value. Small growth stocks are selected from in-house research, have strong balance sheets, are followed by few analysts and are owned by relatively few institutions.

The asset mix Jan. 1 was 80% equities, 5% fixed income and 15% cash.

The firm follows 30 stocks closely and 755, generally; 15% of research is generated internally.

James M. Connors is chief investment officer; Ronald H. Seher is client contact.

Consistent Asset Management Co.

116 Commons Court, Chadds Ford, Pa. 19317; (215) 558-3000

Total assets managed	$1,050,000,000
Total discretionary	$1,050,000,000
Total tax-exempt assets	$1,000,000,000
Total discretionary tax-exempt	$1,000,000,000
Tax-exempt clients	5
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	4

Consistent Asset Management Co. is an active bond and short-term manager that uses mathematical analysis to allocate portfolios between U.S. Treasury issues and cash. It is trend-recognition oriented, but does not use forecasting. Options and fixed-income futures are used.

The asset mix Jan. 1 was 100% bonds.

Daryl L. Hudson is chief investment officer; David W. Umbs is client contact.

Constitution Capital Management

53 State St., Boston, Mass. 02109; (617) 722-4800

Total assets managed	$3,179,000,000
Total discretionary	$3,179,000,000
Total tax-exempt assets	$2,994,000,000
Total discretionary tax-exempt	$2,994,000,000
Tax-exempt clients	310
Types of clients	CEFG
Minimum separate account	$5,000,000

Constitution Capital Management is an active equity, active bond, balanced, short-term and tactical asset allocation manager.

Its primary equity approach employs quantitative valuation through a three-step process: equities are ranked by computer models focusing on fundamental factors; attractively ranked securities are screened to avoid risk; and buy/sell decisions are executed uniformly. The firm's fixed-income management adds value through sector switches and issue selection. Portfolio durations are similar to that of the Shearson Lehman Brothers Government/Corporate Bond Index.

The asset mix Jan. 1 was 33.2% stocks, 46.8% bonds and 20% cash.

The firm follows 150 stocks closely and 600, generally.

The parent is Bank of New England Corp.

John G. Anderson is chief investment officer; Harry Sterling Jr. is client contact.

Continental Assurance Co.

CNA Plaza, Chicago, Ill. 60685; (312) 822-5000

Total assets managed	$9,892,000,000
Total discretionary assets	$6,486,000,000
Total tax-exempt assets	$6,486,000,000
Total discretionary tax-exempt	$6,486,000,000
GICs	$4,531,000,000
Annuities	$372,000,000
401(k)/457 assets managed	$4,078,000,000
Types of accounts managed	CGJ

Continental Assurance Co. is primarily a GIC manager.

Its equity approach focuses on long-term growth emphasizing security of principal. Its fixed-income approach is passive and uses interest rate anticipation and sector analysis, buying and holding bonds while immunizing a portion of the portfolio.

The separate account asset mix Jan. 1 was 3.6% stocks, 91.7% bonds, 0.1% cash, 1.1% mortgages, 1.5% mortgage-backed securities and 2% policy loans.

Don Rycroft is chief investment officer; Ralph Vuono is client contact.

Continental Capital Management Corp.

111 W. Jackson, Suite 1305, Chicago, Ill. 60604; (312) 986-3000

Total assets managed	$900,000,000
Total discretionary	$900,000,000
Total tax-exempt assets	$900,000,000
Total discretionary tax-exempt	$900,000,000
Mortgage-backed assets	$214,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	24
Types of accounts managed	CFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	3

Continental Capital Management Corp. is an active equity, active bond, balanced and convertible manager.

Its equity approach is value-oriented, using Graham & Dodd analysis and focusing on low p/e. The duration-based fixed-income approach uses sector analysis.

The asset mix Jan. 1 was 30% stocks, 65% fixed-income and 5% cash.

The firm follows 75 stocks closely and 600, generally; 60% of the research is generated internally.

Edward J. Calkins is chief investment officer; Raymond O. Wicklander Jr. is client contact.

Conus & Nicholson Inc.

800 W. 47th St., Suite 101, Kansas City, Mo. 64112; (816) 931-5757

Total assets managed	$68,000,000
Total discretionary	$67,000,000
Total tax-exempt assets	$48,000,000
Total discretionary tax-exempt	$48,000,000
Tax-exempt clients	8
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Conus & Nicholson Inc. is an active fixed-income, balanced and tactical asset allocation manager.

Its fixed-income approach emphasizes interest rate anticipation. Equities are used in tactical asset allocation.

The asset mix Jan. 1 was 20% stocks, 70% bonds and 10% cash.

The firm follows 20 to 30 stocks closely and 100, generally; 25% of research is generated internally.

Ronald L. Conus is chief investment officer; Jennifer D. Nicholson is client contact.

Cooke & Bieler Inc.

1700 Market St., Suite 3222, Philadelphia, Pa. 19103; (215) 567-1101

Total assets managed	$3,134,000,000
Total discretionary	$3,134,000,000
Total tax-exempt assets	$2,584,000,000
Total discretionary tax-exempt	$2,584,000,000
401(k)/457 assets managed	$87,000,000
Tax-exempt clients	94
Types of accounts managed	CEFG
Minimum separate account	$25,000,000
No. of portfolio managers	10

Cooke & Bieler Inc. is an active equity, active fixed-income, balanced and mutual fund manager.

Its equity approach stresses low-risk growth. Portfolios are structured with higher-than-market yields and return on equity, lower-than-market betas and strong balance sheets.

Its fixed-income approach uses interest rate anticipation, with emphasis on credit analysis and a structured maturity schedule.

The asset mix Jan. 1 was 78% stocks, 11% bonds and 11% cash.

The firm follows 70 stocks closely and 250, generally; 80% of research is generated internally.

The parent is United Asset Management Corp.

Robert T. Brooks is client contact.

Cook Inlet Investment Management Inc.

1 Bush St., 11th Floor, San Francisco, Calif. 94104-4425; (415) 576-3309

Total assets managed	$107,000,000
Total discretionary	$96,000,000
Total tax-exempt assets	$107,000,000
Total discretionary tax-exempt	$96,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	2

Cook Inlet Management Inc. is an active equity and active fixed-income manager.

Its equity approach seeks high total returns by focusing on growth in dividends and using consistent risk-controlled strategies. Its short-term, high-quality fixed-income style emphasizes relative value analysis over market timing.

The asset mix Jan. 1 was 4% stocks, 90% bonds and 6% cash.

The firm follows 50 stocks closely and 200, generally.

The parent is Cook Inlet Region Inc.

James Elder is chief investment officer; Lisa Weiss is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

Copley Real Estate Advisors

399 Boylston St., Boston, Mass. 02116; (617) 578-1200

Total assets managed	$15,700,000,000
Total discretionary	$15,600,000,000
Total tax-exempt assets	$10,100,000,000
Discretionary tax-exempt	$10,000,000,000
Equity real estate assets	$10,000,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$100,000,000

Copley Real Estate Advisors, a real estate manager, emphasizes a value-added strategy using a contrarian philosophy (i.e., developmental investing, repositioning, redevelopment). The investments are structured as partnerships with local real estate developers in selected markets.

The asset mix Jan. 1 was 100% equity real estate.

The parent is The New England.

Kevin M. Mahony is chief investment officer; John C. Phillips Jr. is client contact.

Corbyn Associates Inc.

Suite 330, The Quadrangle, Village of Cross Keys, Baltimore, Md. 21210; (301) 532-8600

Total assets managed	$130,000,000
Total discretionary	$130,000,000
Total tax-exempt assets	$85,000,000
Total discretionary tax-exempt	$85,000,000
International equity assets	$6,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	108
Types of accounts managed	CEF
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	3

Corbyn Associates Inc., a balanced manager, uses short-term, high-quality, corporate bonds interspersed with Treasuries, providing steady yield vehicles. "Special situation" bonds are added for appreciation and income.

The asset mix Jan. 1 was 39% stocks, 32% bonds and 29% cash.

The firm follows 50 stocks closely and 500, generally.

Daniel R. Long III is chief investment officer; Richard Hynson Jr. is client contact.

Cornell Capital Management

9630 Clarence Center Road, Clarence Center, N.Y. 14032; (716) 741-2963

Total assets managed	$10,000,000
Total discretionary	$10,000,000
Total tax-exempt assets	$10,000,000
Total discretionary tax-exempt	$10,000,000
Tax-exempt clients	32
Minimum separate account	$200,000
No. of portfolio managers	1
Size of research staff	1

Cornell Capital Management is an active and passive equity, balanced and short-term manager.

Its equity approach stresses relative value; securities are purchased at below true value and sold when they become fully priced. Graham & Dodd analysis is used. The emphasis is on individual selection; consideration of economy and industrial factors are secondary. Its fixed-income approach uses sector analysis. Options are used.

The asset mix Jan. 1 was 80% equities and 20% cash.

The firm follows three stocks closely and 10, generally; 95% of the research is generated internally.

David C. Hartzell Jr. is chief investment officer and client contact.

Cornerstone Asset Management Partners

270 Madison Ave., New York, N.Y. 10016; (212) 481-6040

Total assetsmanaged	$25,000,000
Total discretionary	$25,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
Tax-exempt clients	2
Types of accounts managed	CF
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	4

Cornerstone Asset Management Partners is a quantitative domestic equity manager.

The firm creates broadly diversified portfolios of medium- and large-cap stocks designed to deliver approximately 300 to 400 basis points over the S&P 500 with approximately 10% to 20% less risk.

The asset mix Jan. 1 was stocks 99%; cash 1%.

The firm follows 700 stocks closely and 700, generally; all research is generated internally.

Jac Curley is chief investment officer; Duane G. Roberts is client contact.

Corporate Investment Associates (RT) Inc.

P.O. Box 7500 Station A, 70 York St., Sixth Floor, Toronto, Ontario M5W 1P9; (416) 981-6142

Total assets managed	$7,012,000,000
Total discretionary	$7,012,000,000
Total tax-exempt	$4,183,000,000
Total discretionary tax-exempt	$4,183,000,000
For subsidiaries of U.S. firms	$1,295,000,000
Equity real estate assets	$101,000,000
Mortgage assets	$248,000,000
Non-North American equities	$38,000,000
Equity indexed assets	$26,000,000
Dedicated/immunized assets	$299,000,000
Tax-exempt clients	418
U.S. subsidiaries	108
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	10
Size of research staff	3

Corporate Investment Associates (RT) Inc., a Canadian firm, is an active and passive equity, active and passive fixed-income, balanced, real estate, active international equity and short-term manager.

Its equity approach is sector rotational and value-oriented. Sector weightings are based on the capital markets outlook with stocks chosen for strong fundamental value.

For fixed-income, about half of the portfolios represent a diversified core and a long-term outlook; half reflects the three-month cyclical outlook.

In real estate, the firm concentrates on locations within the economic influence of major metropolitan areas with diversified economies.

The asset mix Jan. 1 was 34% Canadian stocks, 7% U.S. stocks, 46% fixed income, 5% cash, 5% mortgages and 3% offshore equities.

It follows 100 stocks closely and 400, generally; 25% of research is generated internally.

The parent is Royal Trust Corp.

B. Lee Bentley is chief investment officer; Timothy K. Griffin is client contact.

Corporate Property Investors

305 E. 47th St., New York, N.Y. 10017; (212) 421-8200

Total assets managed	$5,000,000,000
Total discretionary	$5,000,000,000
Total tax-exempt assets	$2,800,000,000
Total discretionary tax-exempt	$2,800,000,000
Equity real estate assets	$2,700,000,000
Mortgage assets	$100,000,000
Tax-exempt clients	33
Types of accounts managed	CEF
Minimum separate account	$1,000,000

Corporate Property Investors is a real estate manager.

The firm is an equity-oriented REIT with a portfolio concentrated in 28 regional shopping centers and six office buildings. The firm emphasizes income growth and capital appreciation in real terms with minimum risk.

The asset mix Jan. 1 was 97% equity real estate and 3% mortgages.

Hans C. Mautner is chief investment officer; William J. Lyons is client contact.

County NatWest Investment Management Ltd.

100 Wall St., New York, N.Y. 10005; (212) 440-8565

Total assets managed	$20,276,000,000
Total discretionary	$20,276,000,000
Total tax-exempt assets	$1,373,000,000
Total discretionary tax-exempt	$1,373,000,000
International equity assets	$28,000,000
International fixed-income	$23,000,000
Fixed-income indexed assets	$433,000,000
Tax-exempt clients	8
Types of accounts managed	CG
Minimum separate account	$20,000,000
No. of portfolio managers	36
Size of research staff	14

County NatWest Investment Management Ltd. is an active and passive domestic equity and fixed-income, balanced, active and passive international equity and fixed-income, short-term and tactical asset allocation manager.

Its equity approach employs active market allocation, using fundamental subjective judgments with quantitative implementation. Fixed-income investments are based on interest rate anticipation. Options and financial futures are used.

Currency overlay management also is offered. Of the assets above, $866 million in discretionary tax-exempt assets are managed in dynamic currency overlay programs. All of the underlying assets are managed internally.

The parent is National Westminster Bank PLC.

Roger Bartley is chief investment officer; Lee-Ann Thompson is client contact.

Cowen Asset Management

Financial Square, 28th Floor, New York, N.Y. 10005; (212) 495-6843

Total assets managed	$479,000,000
Total discretionary	$479,000,000
Total tax-exempt assets	$352,000,000
Total discretionary tax-exempt	$352,000,000
Tax-exempt clients	184
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	4

Cowen Asset Management is an active equity and fixed-income manager.

Its income and growth discipline seeks companies with above-market yields, prospects of future dividend growth and balance sheet strength. Its emerging growth approach focuses on smaller-cap names with particular attention to high technology and health care. Its fixed-income approach uses only Treasury securities in an active duration process.

The firm follows 100 stocks closely and 150, generally; half of the research is generated internally.

The parent is Cowen & Co.

William Church is chief investment officer; Jack Estes and Len Oremland are client contacts.

Canadian investment managers

Firm	$ mlns.*
Jarislowsky, Fraser	9,400
AMI Partners	6,098
Gryphon Investment	5,543
Sceptre Investment	4,770
Mu-Cana Investment	4,230
Corporate Investment	4,183
Confed Investment	3,877
Crown Life	3,647
Phillips, Hager & North	3,200
Knight, Bain, Seath	2,651
Sun Life of Canada	2,279
MT Associates	2,267
Barclays McConnell	2,088
MacKenzie Financial	2,000
CT Investment Counsel	1,527
National Trust	1,459
Morguard Investments	1,450
Trafalgar Capital	1,333
Hodgson Roberton Laing	1,211
McLean, Budden	1,200
ManuVest	941
Assurance-vie Desjardins	928
Elliott & Page Investment	772
Guardian Capital	625
Canagex Investments	545
Central Guaranty Trust	535
Aetna Capital	436
Prudential Assurance	410
Crown America Investment	400
Laurentian Investment	400
Standard Life	364
Foyston, Gordon & Payne	320
Managed Investments	320
Leith Wheeler Investment	315
Penreal Advisors	312
Pembroke Management	275
Investors Group Trust	257
Batterymarch: Canada	254
Seamark Asset	205
Laketon Investment	154
International Trust	75
Horgan Tattersall	70
Guardian Timing Services	10
Edgecombe Properties	6
Total	**73,542**

*Discretionary tax-exempt assets in U.S. dollars

Crabbe-Huson Co.

121 S.W. Morrison, Suite 1400, Portland, Ore. 97204; (503) 295-0111

Total assets managed	$612,000,000
Total discretionary	$612,000,000
Total tax-exempt assets	$437,000,000
Total discretionary tax-exempt	$437,000,000
International equity assets	$6,000,000
Equity indexed assets	$5,000,000
Mortgage-backed assets	$6,000,000
401(k)/457 assets managed	$13,000,000
Tax-exempt clients	31
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	5

The Crabbe-Huson Co. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is price-driven, value-oriented and risk averse. Investments are concentrated in out-of-favor stocks bought at substantial discounts with an identifiable catalyst for price advance.

For fixed income, the firm identifies interest rate turning points to add value through duration shifts.

The asset mix Jan. 1 was 38% stocks, 28% bonds, 33% cash and 1% mortgage-backed securities.

The firm follows 100 stocks closely and 400, generally; 60% of the research is generated internally.

Richard S. Huson is chief investment officer; James E. Crabbe is client contact.

Cramer Rosenthal McGlynn

520 Madison Ave., New York, N.Y. 10022; (212) 838-3830

Total assets managed	$370,000,000
Total discretionary	$370,000,000
Total tax-exempt assets	$130,000,000
Total discretionary tax-exempt	$130,000,000
Tax-exempt clients	18
Types of accounts managed	CEFJ
Minimum separate account	$3,000,000
No. of portfolio managers	3
Size of research staff	3

Cramer Rosenthal McGlynn Inc. is an active equity, balanced and special investments manager.

Its equity approach emphasizes capital appreciation, stable asset allocation and concentration. Changing dynamics, low relative valuations and low institutional ownership/minimal research coverage are considered. Its fixed-income approach uses interest rate anticipation, emphasizing short-term U.S. government obligations.

The asset mix Jan. 1 was 60% stocks, 26% bonds, 10% cash and 4% limited partnerships.

The firm generates 30% of its research internally.

Gerald B. Cramer is chief investment officer; Lena A. Khatcherian is client contact.

Crawford Investment Counsel Inc.

100 Galleria Parkway N.W., Suite 980, Atlanta, Ga. 30339; (404) 859-0045

Total assets managed	$263,000,000
Total discretionary	$263,000,000
Total tax-exempt assets	$217,000,000
Total discretionary tax-exempt	$217,000,000
Tax-exempt clients	14
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	1

Crawford Investment Counsel Inc. is an active equity and balanced manager.

In equities, the firm focuses on a dividend growth style. Portfolios have an above-average current yield and an above-average dividend growth rate, which results in downside protection and low volatility.

The asset mix Jan. 1 was 44% stocks, 32% bonds and 24% cash.

The firm follows 100 stocks closely and 400, generally; 90% of research is generated internally.

John H. Crawford is chief investment officer; Sarah Jane Ross is client contact.

Credit Suisse Asset Management

280 Park Ave., 27th Floor East, New York, N.Y. 10017; (212) 557-0510

Total assets managed	$126,000,000
Total discretionary	$126,000,000
Total tax-exempt assets	$104,000,000
Total discretionary tax-exempt	$104,000,000
International equity assets	$83,000,000
International cash assets	$21,000,000
Tax-exempt clients	9
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	6

Credit Suisse Asset Management is an active international/global equity manager.

Its growth stock approach incorporates an actively managed, three-tiered, bottom-up/top-down process that examines companies, worldwide investment themes and country/currency allocations. Forward currency contracts are used.

The asset mix Jan. 1 was 80% stocks and 20% cash.

The firm follows 120 stocks closely and 200, generally; 30% of research is generated internally.

The parent is Credit Suisse.

Gordon L. Bowyer is chief investment officer; Richard R. Smith is client contact.

Crestar Bank

919 E. Main St., Richmond, Va. 23219; (804) 782-7405

Total assets managed	$6,714,000,000
Total discretionary assets	$6,714,000,000
Total tax-exempt assets	$2,693,000,000
Total discretionary tax-exempt	$2,693,000,000
Mortgage-backed assets	$20,000,000
Tax-exempt clients	187
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	25
Size of research staff	5

Crestar Bank is an active equity, active fixed-income, balanced, short-term and GIC manager.

Charles H. Montford is chief investment officer; Wayne G. Larochelle is the client contact.

Capitoline Investment Services Inc. manages all of the assets above on behalf of the parent company.

Its equity approach places heavy emphasis on relative value. Strong quantitative disciplines identify quality issues for in-depth fundamental analysis. Its fixed-income approach concentrates on interest rate anticipation, sector and quality yield spread analysis and active risk management to structure portfolios.

The asset mix Jan. 1 was 30% stocks, 23% bonds, 37% cash, 1% mortgage-backed securities and 9% GICs.

The firm follows 150 stocks closely and 6,000, generally.

William E. Hessler is client contact.

Criterion Investment Management Co.

1000 Louisiana, Houston, Texas 77002; (713) 751-2400

Total assets managed	$10,287,000,000
Total discretionary	$7,959,000,000
Total tax-exempt assets	$7,943,000,000
Total discretionary tax-exempt	$7,943,000,000
Tax-exempt clients	95
Types of accounts managed	CEFGJ
Minimum separate equity account	$1,000,000
Minimum separate bond account	$10,000,000
No.of portfolio managers	13
Size of research staff	7

Criterion Investment Management Co. is an active equity, fixed-income, balanced and short-term manager.

Its equity approach focuses on determining the relative attractiveness of stock vs. cash equivalents and has a growth bias with major sectors that are perceived to be the most attractive.

Its fixed-income approach focuses on interest rate anticipation and sector shifts and uses a proprietary computerized system to evaluate and monitor the risk/reward relationship of individual bonds and bond portfolios.

Options and financial futures are used with client permission.

The firm follows 150 stocks closely and 1,000, generally; 20% of research is generated internally.

The parent is Transamerica Corp.

Charles Miller is chief investment officer; John R. Pipkin is client contact.

Crown America Investment Management Inc. (U.S.)

160 Bloor St. E., 10th Floor, Toronto, Ontario M4W 1B8; (416) 928-5722

Total assets managed	$700,000,000
Total discretionary	$700,000,000
Total tax-exempt	$400,000,000
Total discretionary tax-exempt	$400,000,000
For subsidiaries of U.S. firms	$65,000,000
Mortgage assets	$116,000,000
Non-North American equities	$8,000,000
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	6
Size of research staff	2

Crown America Investment Management Inc. (U.S.), a Canadian firm, is an active domestic and international equity and fixed-income, short-term and balanced manager.

In equities, the firm is a value buyer with a contrarian bias. It seeks quality stocks trading at discount to intrinsic value. Its fixed-income approach is one of strict duration with control oriented to interest rate anticipation, and value added by sector trading, arbitrage and securities lending.

The asset mix Jan. 1 was 27% Canadian stocks, 9% U.S. stocks, 30% bonds, 29% mortgages and 5% non-North American equities.

It follows 300 stocks closely and 1,000, generally; all research is generated internally.

The parent is Crown Life Investment Management Inc. (Canada).

A.G. Wirth is chief investment officer; G.E. Graham is client contact.

Crown Life Insurance Co.

120 Bloor St. E., Toronto, Ontario M4W 1B8; (416) 928-5722

Total assets managed	$8,365,000,000
Total discretionary	$7,470,000,000
Total tax-exempt	$3,647,000,000
Total discretionary tax-exempt	$3,647,000,000
Mortgage assets	$1,058,000,000
Non-North American equities	$8,000,000
Mortgage-backed assets	$25,000,000
Tax-exempt clients	1,185
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	25
Size of research staff	15

Crown Life Insurance Co., a Canadian firm, is an active domestic and international equity and fixed-income, balanced, real estate and short-term manager.

Its equity approach is value-oriented with a contrarian bias, seeking quality stocks trading at a discount to real asset value. Its fixed-income approach is managed by strict duration control, oriented to interest rate anticipation. Value is added by sector spread trading, arbitrage and certificate lending. Financial futures are used.

The asset mix Jan. 1 was 27% Canadian stocks, 9% U.S. stocks, 29% bonds, 29% mortgages, 1% mortgage-backed securities and 5% non-North American equity.

All research is generated internally.

The parent is Crownx Inc.

A.G. Wirth is chief investment officer and client contact.

Cseh International & Associates Inc.

1235 Westlakes Drive, Suite 370, Berwyn, Pa. 19312; (215) 889-0289

Total assets managed	$3,000,000
Total discretionary	$3,000,000
Total tax-exempt assets	$3,000,000
Total discretionary tax-exempt	$3,000,000
International equity assets	$3,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	2

Cseh International & Associates Inc., an active global/international equity manager, emphasizes low p/e stocks. The firm's philosophy is that low p/e stocks consistently outperform the market averages by more than 300 basis points annually.

The asset mix Jan. 1 was 100% international equities.

The firm follows 300 stocks closely and 800, generally; 75% of the research is generated internally.

Sandor Cseh is chief investment officer; Donald J. McBride is client contact.

Citizens and Southern Trust Co. (Florida) N.A.

1 Financial Place, Fort Lauderdale, Fla. 33394; (305) 765-2076

See entry for C&S/SOVRAN TRUST CO.

CSI Asset Management Inc.

20 N. Clark St., Chicago, Ill. 60602; (312) 236-8271

Total assets managed	$1,646,000,000
Total discretionary	$1,575,000,000
Total tax-exempt assets	$1,619,000,000
Total discretionary tax-exempt	$1,569,000,000
Mortgage-backed assets	$250,000,000
Tax-exempt clients	19
Types of accounts managed	CEFG
Minimum separate account	$3,000,000
No. of portfolio managers	6
Size of research staff	2

CSI Asset Management Inc., formerly Capital Supervisors Inc., is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach identifies stocks positioned to outperform the market from a universe of high-quality, large- and medium-cap issues exhibiting superior relative earnings momentum, positive technical characteristics and reasonable valuation. Its fixed-income approach is top down and uses a risk-controlling framework to adjust portfolio duration, yield curve emphasis, sector allocation and individual holdings within a broad array of high-quality instruments.

The asset mix Jan. 1 was 7% stocks, 70% bonds, 7% cash and 16% mortgage-backed securities.

The firm follows 35 stocks closely and 225, generally; 50% of the research is generated internally.

The parent is Prudential Asset Management Co.

Dwight D. Churchill is chief investment officer; Beatrice L. Fields is client contact.

C&S Investment Advisors

P.O. Box 4114, Atlanta, Ga. 30302; (404) 897-3306

Total assets managed	$2,960,000,000
Total discretionary	$1,640,000,000
Total tax-exempt assets	$1,580,000,000
Total discretionary tax-exempt	$1,580,000,000
Dedicated/immunized assets	$12,000,000
Tax-exempt clients	46
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	5

C&S Investment Advisors Inc. is an active equity, active bond, balanced and short-term manager.

Its equity approach is earnings driven, using a value-oriented growth style. It evaluates a stock's growth prospects in relation to its historical earnings momentum, p/e ratio and earnings surprise. Stock index futures are used.

In fixed income, it offers two maturity structures: four to five years and nine to 11 years. Value is added relative to the comparable indexes by spread and sector management.

The asset mix Jan. 1 was 31% stocks, 35% bonds and 34% cash.

The firm follows 250 stocks closely and 1,000, generally; 50% of research is generated internally.

The parent is C&S/Sovran Corp.

Michael C. Harhai is chief investment officer; James S. Skesavage Jr. is client contact.

C&S/Sovran Trust Co.

33 North Ave., Atlanta, Ga. 30308; (404) 581-2121

Total assets managed	$41,327,000,000
Total discretionary assets	$15,430,000,000
Total tax-exempt assets	$22,345,000,000
Total discretionary tax-exempt	$6,018,000,000
Real estate equity assets	$17,000,000
Mortgage assets	$8,000,000
International equity assets	$7,000,000
Equity indexed assets	$18,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	31
Size of research staff	8

C&S/Sovran Trust Co., through its operating subsidiaries and trust affiliates, provides active domestic and global equity, active fixed-income, balanced, real estate and short-term management.

The figures above reflect the assets of the following: Citizens and Southern Trust Co. (Florida) N.A.; Citizens and Southern Trust Co. (Georgia) N.A.; Citizens and Southern Trust Co. (South Carolina) N.A.; Sovran Bank N.A.; Sovran Bank/Maryland; and Sovran Bank/Tennessee.

The primary equity approach is driven by a low p/e, earnings estimate momentum and earnings surprise discipline. The primary fixed-income approach emphasizes duration risk, undervalued sectors, structure sensitivity and credit analysis.

The real estate approach focuses on high-grade commercial properties in the Southeast that are capable of producing attractive cash returns and have lease structures with potential rental increases and expense stops.

The asset mix Jan. 1 was 52% stocks, 35% bonds, 10% cash, 1% equity real estate, 1% mortgages and 1% other.

The bank follows 350 stocks closely and 800, generally; 20% of research is generated internally.

The parent is C&S/Sovran Corp.

Robert V. Callahan is chief investment officer; J. Dan Davis is client contact.

CT Investment Counsel Inc.

110 Yonge St., Suite 300, Toronto, Ontario M5C 1T4; (416) 869-5931

Total assets managed	$2,282,000,000
Total discretionary	$2,282,000,000
Total tax-exempt	$1,527,000,000
Total discretionary tax-exempt	$1,527,000,000
Non-North American equities	$14,000,000
Dedicated/immunized assets	$153,000,000
Tax-exempt clients	48
U.S. subsidiaries	4
Types of accounts managed	CGU
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	4

CT Investment Counsel Inc., a Canadian firm, is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Its equity approach employs a bottom-up methodology with a top-down confirmation, using three well-defined disciplines: quantitative, fundamental and technical. Companies ranked highly by the bottom-up methodology are integrated with the top-down analysis. The fixed-income approach uses interest rate anticipation and sector/credit trading. Options and stock index futures are used.

In addition to the assets above, $14 million in discretionary tax-exempt assets are passed to external managers for management.

The asset mix Jan. 1 was 39% Canadian stocks, 3% U.S. stocks, 50% bonds, 3% cash and 5% non-North American stocks.

It follows 130 stocks closely and 200, generally; 60% of research is generated internally.

The parent is CT Financial Services Inc. (Canada Trust).

John P. Mulvihill is chief investment officer; Stanley G. Archdekin is client contact.

Cullen, Fortier Asset Management

21550 Oxnard St., Suite 430, Woodland Hills, Calif. 91367; (818) 710-7788

Total assets managed	$81,000,000
Total discretionary	$61,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
401(k)/457 assets managed	$11,000,000
Tax-exempt clients	106
Types of accounts managed	CEG
Minimum separate account	$200,000
No. of portfolio managers	2
Size of research staff	2

Cullen, Fortier Asset Management is an active equity, active bond and balanced manager.

Its common stock selection emphasizes rapid earnings-per-share growth. In fixed income, it uses interest rate anticipation, varying maturities as rates shift. Options are used.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

The firm follows 120 stocks closely and 250, generally; all research is generated internally.

Rick Cullen is chief investment officer; Paul Fortier is client contact.

Cumberland Advisors

614 Landis Ave., P.O. Box 663, Vineland, N.J. 08360; (609) 692-6690

Total assets managed	$174,000,000
Total discretionary	$162,000,000
Total tax-exempt assets	$60,000,000
Total discretionary tax-exempt	$56,000,000
Mortgage-backed assets	$18,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	86
Types of accounts managed	C
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	2

Cumberland Advisors is an active equity, fixed-income, balanced and short-term account manager.

Its equity approach relies primarily on fundamental analysis with a bias toward low p/e, p/s or p/cf valuations. Its top-down fixed-income approach integrates interest rate anticipation, sector analysis and duration.

The asset mix Jan. 1 was 45% stocks, 15% bonds, 10% cash and 30% mortgage-backed securities.

The firm follows 50 stocks closely and 200, generally; 75% of the research is generated internally.

David R. Kolok is chief investment officer; Suzanne N. Greenberg is client contact.

John M. Cunningham Inc.

200 Eagle Road, Suite 204, Wayne, Pa. 19087; (215) 687-5060

Total assets managed	$18,000,000
Total discretionary	$18,000,000
Total tax-exempt assets	$12,000,000
Total discretionary tax-exempt	$12,000,000
Tax-exempt clients	25
Types of accounts managed	C
Minimum separate account	$250,000
No. of portfolio managers	1
Size of research staff	1

John M. Cunningham Inc. is an active equity and balanced manager.

Its equity approach uses growth stocks, sector rotation and Graham & Dodd principles. The fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 10% stocks and 90% cash.

The firm follows 200 stocks closely and 1,000, generally; all research is generated internally.

John M. Cunningham is chief investment officer and client contact.

Martin Currie Ltd. & Subsidiaries

29 Charlotte Square, Edinburgh, U.K. EH2 4HA; 031-225-3811

Total assets managed	$4,245,000,000
Total discretionary	$4,245,000,000
Total tax-exempt assets	$173,000,000
Total discretionary tax-exempt	$173,000,000
International equity assets	$168,000,000
International cash assets	$5,000,000
Tax-exempt clients	6
Types of accounts managed	CF
Minimum separate account	$15,000,000
No. of portfolio managers	12
Size of research staff	12

Martin Currie Ltd. & Subsidiaries is an active international/global equity, short-term and tactical asset allocation manager.

Its long-term equity approach emphasizes country allocation. Emerging growth and growth stocks, sector rotation and value are important, but the approach will differ according to the nature of the market in which assets are invested. It uses a primarily bottom-up approach to identify growth stocks and undervalued companies.

Fixed-income securities are used only to fulfill the requirements of endowment clients, dictated by interest rates and inflation trends.

Options and stock index futures are used.

The asset mix Jan. 1 was 97% stocks and 3% cash.

The firm follows 600 stocks closely and 1,000, generally; 40% of research is generated internally.

The parent is Martin Currie Ltd.

Joe Scott Plummer is chief investment officer; Michael Kennedy is client contact.

The assets of the following subsidiaries are included above.

- Martin Currie Inc. manages $191 million for North American clients, of which $173 million — representing six clients — is tax exempt.

Client contacts for North America are Mr. Kennedy, Marianne Hay and Michael Gibson.

- Martin Currie Investment Management Ltd. manages $3.757 billion for U.K. clients, of which $2.95 billion is for U.K. pension funds.
- Martin Currie Unit Trusts Ltd. manages $297 million in a wide range of open-end mutual funds.

Cutler & Co. Inc.

503 Airport Road, Medford, Ore. 97504; (503) 770-9000

Total assets managed	$581,000,000
Total discretionary	$581,000,000
Total tax-exempt assets	$466,000,000
Total discretionary tax-exempt	$466,000,000
401(k)/457 assets managed	$15,000,000
Tax-exempt clients	185
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	5

Cutler & Co. Inc., an active equity and balanced manager, bases its philosophy on analysis of corporate dividend policy. The firm maintains that dividend growth is a better indicator of price movement than reported earnings.

The asset mix Jan. 1 was 96% stocks, 3% bonds and 1% cash.

The firm follows 100 stocks closely and 25, generally; all research is generated internally.

Geoffrey W. Cutler is chief investment officer; Mark S. Patten is client contact.

Cutugno & Associates Inc.

40 Wall St., Suite 2124, New York, N.Y. 10005; (212) 422-0860

Total assets managed	$136,000,000
Total discretionary	$136,000,000
Total tax-exempt assets	$136,000,000
Total discretionary tax-exempt	$136,000,000
International fixed-income	$23,000,000
International cash assets	$7,000,000
Dedicated/immunized assets	$72,000,000
Mortgage-backed assets	$34,000,000
Tax-exempt clients	13
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

Cutugno & Associates Inc., an active domestic and international/global fixed-income and short-term manager, bases its approach on interest rate anticipation and sector analysis. Quantitative techniques are used in portfolio structuring, sector weighting and security selection. Fixed-income futures are used.

The asset mix Jan. 1 was 70% bonds; 5% cash and 25% mortgage-backed securities.

Leonard F. Cutugno is chief investment officer; Vincent Terrusa is client contact.

25 largest bond index fund managers

Firm	$ mils.*
Mellon Bond	7,173
Wells Fargo Nikko	7,061
Lincoln Capital	6,135
State Street Bank	6,119
Mellon Capital	5,675
Jennison Associates	4,155
Bankers Trust	3,461
Prudential Fixed Income	3,009
T. Rowe Price Associates	2,970
ANB Investment	1,667
Putnam	1,324
First Wisconsin Asset	1,000
Security Capital	972
Mitchell Hutchins	731
W.R. Lazard	730
Ryan Labs	727
Fidelity Investments	594
PanAgora Asset	513
Chase Investors	450
BEA Associates	437
County NatWest	433
Fiduciary Trust Int'l	379
Aetna Life	359
Bear Stearns	318
Northern Trust	283
Total	**58,675**

*Discretionary tax-exempt assets

D

D.A. Management Inc.
7777 Center Ave., Suite 500, Huntington Beach, Calif. 92647; (714) 891-6080

Total assets managed	$107,000,000
Total discretionary	$81,000,000
Total tax-exempt assets	$107,000,000
Total discretionary tax-exempt	$81,000,000
Equity real estate assets	$72,000,000
Mortgage assets	$3,000,000
Tax-exempt clients	2
Types of accounts managed	G
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	1

D.A. Management Inc., a real estate manager, acquires equity and participating loan interests that have the potential of generating operating cash flow and profits through financial structure, property management and personal involvement.

The asset mix Jan. 1 was 67% equity real estate, 3% mortgages, 6% cash and 24% participating mortgages.

Daniel M. Ardell is chief investment officer and client contact.

Daiwa International Capital Management Corp.
200 Liberty St., 26th Floor, New York, N.Y. 10281; (212) 341-5405

Total assets managed	$15,107,000,000
Total discretionary	$15,107,000,000
Total tax-exempt assets	$501,000,000
Total discretionary tax-exempt	$501,000,000
International equity assets	$419,000,000
International cash assets	$82,000,000
Tax-exempt clients	9
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	60
Size of research staff	12

Daiwa International Capital Management Corp. is an active international/global equity manager.

The firm specializes in the Pacific Basin. Research-oriented, its stock selection concentrates on assessing the long-term growth potential and the relative value of companies within growth industries throughout the region. Various quantitative techniques are used as screens.

The asset mix Jan. 1 was 83% stocks and 17% cash.

The firm follows 300 stocks closely and 4,067, generally; 70% of research is generated internally.

The parent is Daiwa International Capital Management Co. Ltd.

Nobumasa Wakabayashi is chief investment officer; Jay S. Mancus is client contact.

Dalton, Greiner, Hartman, Maher & Co.
630 Fifth Ave., Suite 3425, New York, N.Y. 10111; (212) 459-0500

Total assets managed	$2,049,000,000
Total discretionary	$2,049,000,000
Total tax-exempt assets	$1,958,000,000
Total discretionary tax-exempt	$1,958,000,000
Tax-exempt clients	55
Types of accounts managed	CFG
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	1

Dalton, Greiner, Hartman, Maher & Co., formerly Dillon Read Capital Management, is an active equity and balanced manager.

Its equity approach emphasizes active asset allocation, using a price-sensitive, bottom-up stock selection process in which securities of quality companies are bought when they are out of favor and undervalued. Cash will be raised when securities are overvalued or the trend to overall liquidity is negative. In balanced accounts, fixed-income assets are actively managed, adjusting maturities depending on valuation and trends of liquidity. High-quality issues are used.

The asset mix Jan. 1 was 71.1% stocks, 28.9% cash.

The firm follows 176 stocks closely.

Timothy G. Dalton Jr. is chief investment officer; Kenneth J. Greiner is client contact.

Darien Capital Management
66 Field Point Road, Third Floor, Greenwich, Conn. 06830; (203) 661-6681

Types of accounts managed	CG
Minimum separate account	$50,000,000
No. of portfolio managers	2
Size of research staff	2

Darien Capital Management offers overwriting programs for equity and bond portfolios. It runs overlays for $1.185 billion in tax-exempt assets, but doesn't manage the underlying assets.

It offers an active index options overwriting program, and an overlay overwriting program on any underlying fixed-income portfolio. Options, stock index and fixed-income futures are used.

Gregory M. Hryb is chief investment officer; Deborah Hootman is client contact.

International managers: June 24.

John Stewart Darrell & Co.
503 Faulconer Drive, Charlottesville, Va. 22901; (804) 977-7010

Total assets managed	$90,000,000
Total discretionary	$90,000,000
Total tax-exempt assets	$34,000,000
Total discretionary tax-exempt	$34,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	31
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	2

John Stewart Darrell & Co. is an active equity, active fixed-income and balanced manager.

Its equity approach uses low p/e stocks and Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 37% stocks, 25% fixed-income and 38% cash.

Jack Darrell is chief investment officer and client contact.

Davenport & Co. of Virginia
801 E. Main St., Richmond, Va. 23219; (804) 780-2117

Total assets managed	$277,000,000
Total discretionary	$165,000,000
Total tax-exempt assets	$108,000,000
Total discretionary tax-exempt	$74,000,000
Tax-exempt clients	28
Types of accounts managed	CEF
Minimum separate account	$200,000
No. of portfolio managers	3
Size of research staff	3

Davenport & Co. of Virginia Inc. is an active equity, passive fixed-income and balanced manager.

Its equity approach is valued oriented. The average beta of equities is lower than that of the S&P 500, reflecting the bias toward low p/es and higher current yields.

In balanced accounts, its fixed-income approach typically uses Treasuries with a maturity spread designed to diversify interest rate exposure.

The asset mix Jan. 1 was 58% stocks, 32% bonds and 10% cash.

The firm follows 85 stocks closely and 130, generally; 75% of research is generated internally.

Joseph L. Antrim is chief investment officer; Nancy P. Jenkins is client contact.

Davidson Capital Management Inc.
P.O. Box 866849, Plano, Texas 75086; (214) 964-5582

Total assets managed	$42,000,000
Total discretionary	$42,000,000
Total tax-exempt assets	$42,000,000
Total discretionary tax-exempt	$42,000,000
Tax-exempt clients	2
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	2

Davidson Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is based on fundamental value and technical strength using highly disciplined valuation searches for undervalued securities.

Its fixed-income approach is based on producing high current return with reduced volatility, using investment quality and intermediate maturities. Interest rate anticipation is used to adjust duration.

The asset mix Jan. 1 was 10.5% stocks, 83.4% bonds and 6.1% cash.

The firm follows 30 stocks closely and 100, generally; 25% of the research is generated internally.

John E. Davidson is chief investment officer and client contact.

Davidson, Garrard, & Goode
P.O. Box 939, Lynchburg, Va. 24505; (804) 847-6600

Total assets managed	$92,000,000
Total discretionary	$92,000,000
Total tax-exempt assets	$27,000,000
Total discretionary tax-exempt	$27,000,000
Tax-exempt clients	50
Types of accounts managed	CF
Minimum separate account	$300,000
No. of portfolio managers	4

Davidson, Garrard & Goode is an active equity, passive fixed-income and balanced manager.

The core equity portfolio is composed of value-oriented stocks, with performance supplemented through the use of growth and Southeastern regional stocks with undervalued characteristics.

Its fixed-income approach uses governments, corporates and municipals with maturities of 10 years or less.

The asset mix Jan. 1 was 42% stocks, 44% bonds and 14% cash.

The firm follows 50 stocks closely and 150, generally; 30% of the research is generated internally.

Edgar D. Garrard is chief investment officer; Stephen L. Crank is client contact.

Davis Hamilton Jackson & Associates
909 Fannin, Suite 550, Houston, Texas 77010; (713) 853-2322

Total assets managed	$278,000,000
Total discretionary	$278,000,000
Total tax-exempt assets	$228,000,000
Total discretionary tax-exempt	$228,000,000
Mortgage-backed assets	$18,000,000
Tax-exempt clients	18
Types of accounts managed	CFG
Minimum separate account	$250,000
No. of portfolio managers	3

Davis Hamilton Jackson & Associates is an active equity, active fixed-income and balanced manager.

Its uses a bottom-up, growth equity approach, believing indexes can be exceeded by a significant commitment to midsized companies and adhering to a strict sell discipline.

Its uses an intermediate-term fixed-income approach, focusing on interest rate anticipation and taking advantage of high-quality sector variations.

The asset mix Jan. 1 was 64% stocks, 11% bonds, 17% cash and 8% mortgage-backed securities.

The firm follows 120 stocks closely; 15% of the research is generated internally.

Robert C. Davis is chief investment officer; Jeffrey Arcy is client contact.

Davis, Weaver & Mendel Inc.
5600 Glenridge Drive, Suite 200, Atlanta, Ga. 30342; (404) 252-0077

Total assets managed	$180,000,000
Total discretionary	$180,000,000
Total tax-exempt assets	$165,000,000
Total discretionary tax-exempt	$165,000,000
Tax-exempt clients	145
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	3

Davis, Weaver & Mendel Inc. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

Its equity approach emphasizes market timing and sector rotation. The investment process is disciplined, based on computer-generated models.

Its primary fixed-income approach is based on interest rate anticipation. Maturity management is used to enhance profitability.

It uses stock index futures for hedging purposes only.

The asset mix Jan. 1 was 100% stocks.

The firm follows 800 stocks closely and 1,200 generally; 100% of research is generated internally.

Thomas H. Weaver is chief investment officer; Marsh Douthat is client contact.

Dawes Investment Service
900 S. U.S. Highway 1, Suite 207, Jupiter, Fla. 33477; (407) 747-0896

Total assets managed	$85,000,000
Total discretionary	$82,000,000
Total tax-exempt assets	$59,000,000
Total discretionary tax-exempt	$56,000,000
Tax-exempt clients	111
Types of accounts managed	CEF
Minimum separate account	$200,000
No. of portfolio managers	2

Dawes Investment Service Inc. is an active equity, active fixed-income and balanced manager.

Its highly disciplined, value-oriented equity strategy uses low p/e stocks and sector rotation. A proprietary mathematical model identifies buy/sell points. A semiactive fixed-income approach uses interest rate anticipation to adjust maturities. Sector mix is based on credit quality/yield spread analysis.

The asset mix Jan. 1 was 55% stocks, 4% bonds and 41% cash.

The firm follows 200 to 300 stocks closely and 7,000, generally; 80% of research is generated internally.

Richard C. Sunshine is chief investment officer; Kristy J. Dodge is client contact.

Dawson-Samberg Capital Management Inc.
354 Pequot Ave., Southport, Conn. 06490; (203) 254-0091

Total assets managed	$150,000,000
Total discretionary	$150,000,000
Total tax-exempt assets	$75,000,000
Total discretionary tax-exempt	$75,000,000
Tax-exempt clients	7
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Dawson-Samberg Capital Management Inc., an active equity and hedge fund manager, is growth-oriented. The firm invests in companies with dominant market positions, pristine balance sheets, a high rate of internal cash generation, a high return on equity and significant prospects for profit growth in the future. Options are used.

The asset mix Jan. 1 was 85% stocks and 15% cash.

Seventy-five percent of the research is generated internally.

Jonathan T. Dawson is chief investment officer; Sheila J. Clancy is client contact.

Dean Investment Associates
2480 Kettering Tower, Dayton, Ohio 45423; (513) 222-0282, ext. 258

Total assets managed	$3,347,000,000
Total discretionary	$3,347,000,000
Total tax-exempt assets	$2,611,000,000
Total discretionary tax-exempt	$2,611,000,000
401(k)/457 assets managed	$100,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	30
Size of research staff	4

Dean Investment Associates is an active equity, balanced and tactical asset allocation manager.

Its equity strategy combines a top-down approach with fundamental and technical methods to select securities and set optimal asset allocation targets.

Its fixed-income approach is passive, using government securities in balanced accounts as a defensive tool.

The asset mix Jan. 1 was 70% stocks, 20% bonds and 10% cash.

25 largest managers of 401(k)/457 assets

Firm	$ mils.*
Aetna Life	12,219
Fidelity Investments	10,217
Travelers	10,024
Bankers Trust	10,001
John Hancock	8,450
Morgan Stanley	8,431
PRIMCO	7,500
Principal Financial	6,700
Prudential Asset	6,322
Massachusetts Mutual	5,700
Provident Nat'l	5,400
Duff & Phelps	5,391
GE Investments	5,008
Vanguard Group	4,341
Continental Assurance	4,078
CIGNA Investments	3,690
Chancellor Capital	3,623
Nationwide Life	3,545
Morley Capital	3,500
NCNB	3,500
Wells Fargo Nikko	3,151
Certus Financial	3,100
First Fidelity	3,051
IDS Trust	2,789
T. Rowe Price Associates	2,570
Total	**142,381**

*Discretionary tax-exempt assets

The firm follows 200 stocks closely; all research is generated internally.

Dennis D. Dean is chief investment officer; Dennis S. Mullins is client contact.

Dearden, Maguire, & Weaver
1 Tower Bridge, 100 Front St., Suite 560, West Conshohocken, Pa. 19428; (215) 832-0277

Total assets managed	$725,000,000
Total discretionary	$700,000,000
Total tax-exempt assets	$350,000,000
Total discretionary tax-exempt	$350,000,000
Tax-exempt clients	49
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	5

Dearden, Maguire, & Weaver Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach invests in growth stocks based on Graham & Dodd principles; it is quality-oriented based on economic outlook, relative valuation analysis and fundamental and technical data.

Its fixed-income approach uses interest rate anticipation. Portfolios are limited to securities with A or better ratings and maturities of 10 years or less.

The asset mix Jan. 1 was 50% stocks, 40% bonds, and 10% cash.

The firm follows 200 stocks closely and 300, generally; 20% of the research is generated internally.

Edward C. Dearden, Alexander A. Maguire and James M. Weaver are chief investment officers; Mr. Dearden is client contact.

Delafield Asset Management
63 Wall St., New York, N.Y. 10005; (212) 269-0660

Total assets managed	$384,000,000
Total discretionary	$384,000,000
Total tax-exempt assets	$134,000,000
Total discretionary tax-exempt	$134,000,000
Tax-exempt clients	12
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	1

Delafield Asset Management Inc., an active equity manager, follows a value-oriented approach with an emphasis on special situations, low p/e and undervalued investments purchased at measured prices to limit market risk.

The asset mix Jan. 1 was 51% stocks, 9% bonds, 38% cash and 2% government obligations.

The firm follows 50 stocks closely and 100, generally; 96% of research is generated internally.

J. Dennis Delafield is chief investment officer and client contact.

Delaware Investment Advisers
1 Commerce Square, Philadelphia, Pa. 19103; (215) 568-5880

Total assets managed	$15,714,000,000
Total discretionary	$15,714,000,000
Total tax-exempt assets	$14,776,000,000
Discretionary tax-exempt	$14,776,000,000
Tax-exempt clients	204
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	22

Delaware Investment Advisers is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach combines sector rotation with low p/e and value/equity income strategies. Its philosophy stresses risk management within a total rate of return orientation.

Its fixed-income approach uses equity-type credit analysis, a sensitivity to business cycles and sophisticated trading strategies to protect the income premium on high-yielding corporate bonds.

The asset mix Jan. 1 was 72.9% stocks, 17.7% bonds and 9.4% cash.

The firm follows 150 stocks closely and 300, generally; 65% of the research is generated internally.

The parent is Delaware Management Co. Inc.

Wayne A. Stork is chief investment officer; John A.C. McMurtrie is client contact.

Delta Financial Management
37 Derby St., Hingham, Mass. 02043; (617) 749-8156

Total assets managed	$69,000,000
Total discretionary	$69,000,000
Total tax-exempt assets	$61,000,000
Total discretionary tax-exempt	$61,000,000
Tax-exempt clients	27
Types of accounts managed	CEJ
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	1

Delta Financial Management Corp. is an active equity, active fixed-income and balanced manager.

The equity approach focuses on low p/e stocks with above-average yields. In fixed income it concentrates on high-quality bonds with maturities of 10 years or less. Its investment philosophy is low risk and conservative.

The asset mix Jan. 1 was 35% stocks, 60% bonds and 5% cash.

The firm follows 100 stocks closely and 300, generally; 90% of research is generated internally.

Frank Weldon is chief investment officer; William M. Weldon is client contact.

Denver Investment Advisors
633 17th St., Suite 1800, P.O. Box 17487, Denver, Colo. 80217; (303) 293-2020

Total assets managed	$4,200,000,000
Total discretionary	$4,110,000,000
Total tax-exempt assets	$3,769,000,000
Total discretionary tax-exempt	$3,767,000,000
Tax-exempt clients	90
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	12

Denver Investment Advisors Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses a fundamental, bottom-up stock selection process focusing on small- to midsize companies. Earnings growth is emphasized and strict valuation techniques are used.

For fixed income, the firm divides the market into three categories. Portfolios emphasize high-quality (non-Treasury), undervalued sectors and special situation bonds. Asset allocation is used to set duration.

The asset mix Jan. 1 was 40% stocks, 49% bonds and 11% cash.

The firm follows 180 stocks closely and 300, generally; 70% of the research is generated internally.

The parent is First Interstate Bank of Denver.

Kenneth V. Penland is chief investment officer; Dennis E. Larkin is client contact.

Deposit Guaranty National Bank
P.O. Box 1200, Jackson, Miss. 39215; (601) 354-8128

Total assets managed	$1,420,000,000
Total discretionary assets	$800,000,000
Total tax-exempt assets	$462,000,000
Total discretionary tax-exempt	$417,000,000
401(k)/457 plan assets	$70,000,000
Types of accounts managed	CEFJ
Minimum separate account	$500,000
No. of portfolio managers	5

Deposit Guaranty National Bank is an active equity, active fixed-income, balanced and real estate manager.

Its equity approach combines sector rotation, growth stock analysis and emerging growth. Its fixed-income approach emphasizes high credit quality, duration analysis and interest rate forecasts.

In real estate, it has equity interests in existing income-producing commercial and industrial property.

The asset mix Jan. 1 was 35% stocks, 60% bonds and 5% cash.

The bank follows 75 stocks closely and 150, generally; 10% of research is generated internally.

The parent is Deposit Guaranty Corp.

Gerald L. White is chief investment officer; David Cleland is client contact.

Devon Institutional Realty Advisors
1999 Harrison St., Suite 810, Oakland, Calif. 94612; (415) 273-8670

Total assets managed	$24,000,000
Total discretionary	$24,000,000
Total tax-exempt assets	$24,000,000
Total discretionary tax-exempt	$24,000,000
Equity real estate assets	$24,000,000
Tax-exempt clients	1
Types of accounts managed	G
Minimum separate account	$20,000,000

Devon Institutional Realty Advisors, a real estate investment manager, works with premier developers/owners that are not normally sellers, but do refinance or sell partial equity interests to form separate account joint ventures with major pension fund investors.

All assets were in equity real estate Jan. 1.

The parent is Devon Capital Management.
Kenneth E. Nitzberg is chief investment officer; David W. Berchenbriter is client contact.

Dewey Square Investors
1 Financial Center, Boston, Mass. 02111; (617) 434-6217

Total assets managed	$3,100,000,000
Total discretionary	$3,100,000,000
Total tax-exempt assets	$3,100,000,000
Total discretionary tax-exempt	$3,100,000,000
Dedicated/immunized assets	$600,000,000
401(k)/457 assets managed	$185,000,000
Tax-exempt clients	150
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	3

Dewey Square Investors Corp. is an active equity, active fixed-income, balanced and short-term manager.
Its equity approach is value oriented, constructing highly diversified portfolios of stocks with high relative valuation ranking and poor relative past price behavior.
Its fixed-income approach uses sector analysis. Portfolios generally have a yield bias. Four key areas are evaluated: duration/maturity; yield curve placement; sector selection; and item selection.
The asset mix Jan. 1 was 35% stocks, 52% bonds and 13% cash.
The firm follows 100 stocks closely and 200, generally; 60% of research is generated internally.
The parent is United Asset Management Corp.
Peter M. Whitman Jr. is chief investment officer; Caroline R. Hovey is client contact.

Dillon, Read International Asset Management
535 Madison Ave., New York, N.Y. 10022; (212) 906-7659

Total assets managed	$366,000,000
Total discretionary	$366,000,000
Total tax-exempt assets	$225,000,000
Total discretionary tax-exempt	$225,000,000
International equity assets	$157,000,000
International cash assets	$68,000,000
Tax-exempt clients	6
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	4

Dillon, Read International Asset Management, an active international/global equity manager, seeks cheap stocks, securing superior growth at below-average market p/es. It employs an active top-down asset allocation within a disciplined framework. Portfolio holdings are limited to 60 stocks.
The asset mix Jan. 1 was 70% stocks and 30% cash.
Eight-five percent of the research is generated internally.
The parent is The Travelers Corp.
Robert Rawe is chief investment officer; David A. Dewey is client contact.

Dimensional Fund Advisors
1299 Ocean Ave., Suite 650, Santa Monica, Calif. 90401; (213) 395-8005

Total assets managed	$4,855,000,000
Total discretionary	$4,855,000,000
Total tax-exempt assets	$4,358,000,000
Total discretionary tax-exempt	$4,358,000,000
International equity assets	$656,000,000
International fixed-income	$1,000,000
Equity indexed assets	$3,030,000,000
Tax-exempt clients	110
Types of accounts managed	CEFGJ
Minimum separate account	$50,000,000
No. of portfolio managers	11

Dimensional Fund Advisors Inc. is an active and passive equity, active domestic and international/global fixed-income, passive international/global equity and short-term manager.
Its primary equity approach is to invest in small companies in the United States and major international markets, providing diversification and potential long-term return premiums.
Its primary fixed-income approach uses a variable maturity strategy that maximizes expected returns by shifting maturities in response to changes in the current prices.
The asset mix Jan. 1 was 83% stocks and 17% bonds.
Seventy-five percent of research is generated internally.
Rex A. Sinquefield is chief investment officer; David G. Booth is client contact.

Discount Corp. of New York Advisers
58 Pine St., New York, N.Y. 10005; (212) 248-8989

Total assets managed	$3,770,000,000
Total discretionary	$3,770,000,000
Total tax-exempt assets	$3,770,000,000
Total discretionary tax-exempt	$3,770,000,000
401(k)/457 assets managed	$88,000,000
Tax-exempt clients	13
Types of accounts managed	CEFG
Minimum separate bond account	$50,000,000
Minimum separate global account	$25,000,000
No. of portfolio managers	5
Size of research staff	17

Discount Corp. of New York Advisers is an active domestic and international/global fixed-income and short-term manager.
Duration adjustments, international allocations, sector and issue selections reflect ongoing fundamental and technical analysis of domestic and foreign interest rate and exchange market trends/developments. The firm focuses on capturing superior returns in differentiated constructive periods while minimizing risk in rising rate environments. Options and fixed-income futures are used.
The asset mix Jan. 1 was 34% bonds and 66% cash.
Patricia de Blank Klink is chief investment officer; Adrian M. Massie Jr. is client contact.

DJ Investment Advisors Inc.
310 Fox Pavilion, Jenkintown, Pa. 19046; (215) 887-6946

Total assets managed	$85,000,000
Total discretionary	$85,000,000
Total tax-exempt assets	$45,000,000
Total discretionary tax-exempt	$45,000,000
Tax-exempt clients	50
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	2

DJ Investment Advisors Inc. is an active equity, active fixed-income and balanced manager.
Its equity approach is value oriented, emphasizing growth, emerging growth and low p/e stocks. Its fixed-income approach is based on interest rate anticipation. Options and stock index futures are used.
The asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash.
The firm follows 50 stocks closely and 150, generally; 75% of research is generated internally.
David A. Schwarm is chief investment officer and client contact.

Dodge & Cox
1 Sansome St., 35th Floor, San Francisco, Calif. 94104; (415) 981-1710

Total assets managed	$7,494,000,000
Total discretionary	$7,494,000,000
Total tax-exempt assets	$6,344,000,000
Total discretionary tax-exempt	$6,344,000,000
Tax-exempt clients	124
Types of accounts managed	CEFGJ
Minimum separate account	$40,000,000
No. of portfolio managers	13
Size of research staff	9

Dodge & Cox is an active equity, active fixed-income and balanced manager.
It takes a fundamental value, diversified approach to equities, investing in established companies that managers believe have positive earnings prospects not reflected in current prices.
Its fixed-income approach focuses on identifying undervalued market sectors and securities to construct high-quality, diversified portfolios. Maturities are gradually adjusted within a range of nine to 15 years. Interest rate anticipation is used.
The asset mix Jan. 1 was 53% stocks, 42% bonds and 5% cash.
The firm follows 250 stocks closely and 500, generally; 70% of the research is generated internally.
Harry R. Hagey is chief investment officer; Kenneth E. Olivier is client contact.

Dollins Symons Management Inc.
1409 Terrace Drive, Pittsburgh, Pa. 15228; (412) 344-3764

Total assets managed	$5,000,000
Total discretionary	$5,000,000
Total tax-exempt assets	$4,000,000
Total discretionary tax-exempt	$4,000,000
Tax-exempt clients	12
Types of accounts managed	CF
Minimum separate account	$100,000
No. of portfolio managers	2

Dollins Symons Management Inc. is an active equity and balanced manager.
Its equity approach is quantitative, emphasizing low p/e stocks. The firm analyzes financial data as a function of change in stock price.
In fixed income, it invests in high-quality obligations with average maturities of three years or less.
The asset mix Jan. 1 was 92% stocks, 5% bonds and 3% cash.
The firm follows 50 stocks closely and 1,700, generally; all research is generated internally.
Charles C. Dollins is chief investment officer; Edward L. Symons Jr. is client contact.

Dominion Trust Co./Capital Management Group
P.O. Box 14061, Roanoke, Va. 24038; (703) 563-6311

Total assets managed	$715,000,000
Total discretionary assets	$715,000,000
Total tax-exempt assets	$515,000,000
Total discretionary tax-exempt	$515,000,000
Dedicated/immunized assets	$103,000,000
Mortgage-backed assets	$47,000,000
401(k)/457 plan assets	$209,000,000
Tax-exempt clients	622
Types of accounts managed	CEFG
Minimum separate account	$2,000,000
No. of portfolio managers	4

Dominion Trust Co./Capital Management Group is an active equity, active fixed-income, balanced, short-term and GIC manager.
In equities, it purchases low p/e stocks of financially strong companies with higher-than-average dividends and earnings growth prospects.
It has two fixed-income approaches: Active duration management seeks to maximize total return through limited interest rate anticipation and moderate sector rotation; stable capital management has short duration portfolios for principal stability.
The asset mix Jan. 1 was 23% stocks, 26% bonds, 6% cash, 11% mortgage-backed securities and 34% other.
Peter E. Dawyot is client contact.

Carl Domino Associates L.P.
580 Village Blvd., Suite 225, West Palm Beach, Fla. 33409; (407) 697-2723

Total assets managed	$250,000,000
Total discretionary	$250,000,000
Total tax-exempt assets	$200,000,000
Total discretionary tax-exempt	$200,000,000
Tax-exempt clients	17
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	4

Carl Domino Associates L.P. is an active equity, active fixed-income and balanced manager.
Its equity approach uses fundamental analysis to identify undervalued, high-yield equities. Its fixed-income approach uses interest rate anticipation and sector analysis. Capital preservation is stressed.
The asset mix Jan. 1 was 82% stocks, 15% bonds and 3% cash.
The firm follows 100 stocks closely and 250, generally; 40% of the research is generated internally.
Carl Domino is chief investment officer; Lawrence T. Barnett III is client contact.

Dorsey & Co. Inc.
511 Gravier St., New Orleans, La. 70130; (504) 524-5431

Total assets managed	$33,000,000
Total discretionary	$33,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
Tax-exempt clients	9
Types of accounts managed	CFG
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	3

Dorsey & Co. Inc. is an active equity and active and passive fixed-income manager.
Its equity approach combines traditional fundamental valuation analysis with technical analysis. Companies are identified with good values that are exhibiting earnings acceleration.
Its fixed-income approach is a combination of high quality and relative value with a concentration in intermediate maturities. The approach is conservative, avoiding aggressive trading and hedging.
The asset mix Jan. 1 was 16% stocks and 84% bonds.
The firm follows 65 stocks closely and 240, generally; 50% of research is generated internally.
Philip J. Dorsey is chief investment officer; Ronald C. Ellington is client contact.

Dreman Value Management
10 Exchange Place, Suite 2050, Jersey City, N.J. 07302; (201) 434-0700

Total assets managed	$3,512,000,000
Total discretionary	$3,512,000,000
Total tax-exempt assets	$2,789,000,000
Total discretionary tax-exempt	$2,789,000,000
International equity assets	$391,000,000
Tax-exempt clients	159
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	16

Dreman Value Management is an active equity, active fixed-income and balanced manager.
Its equity approach is to invest in undervalued, low p/e stocks with high yields and solid fundamentals. Its fixed-income approach uses interest rate anticipation and focuses on safety of principal and yield.
The asset mix Jan. 1 was 91% stocks, 8% bonds and 1% cash.
The firm follows 800 stocks closely and 100, generally; 95% of the research is generated internally.
David N. Dreman is chief investment officer; Lewis W. Parker and Murat H. Davidson Jr. are client contacts.

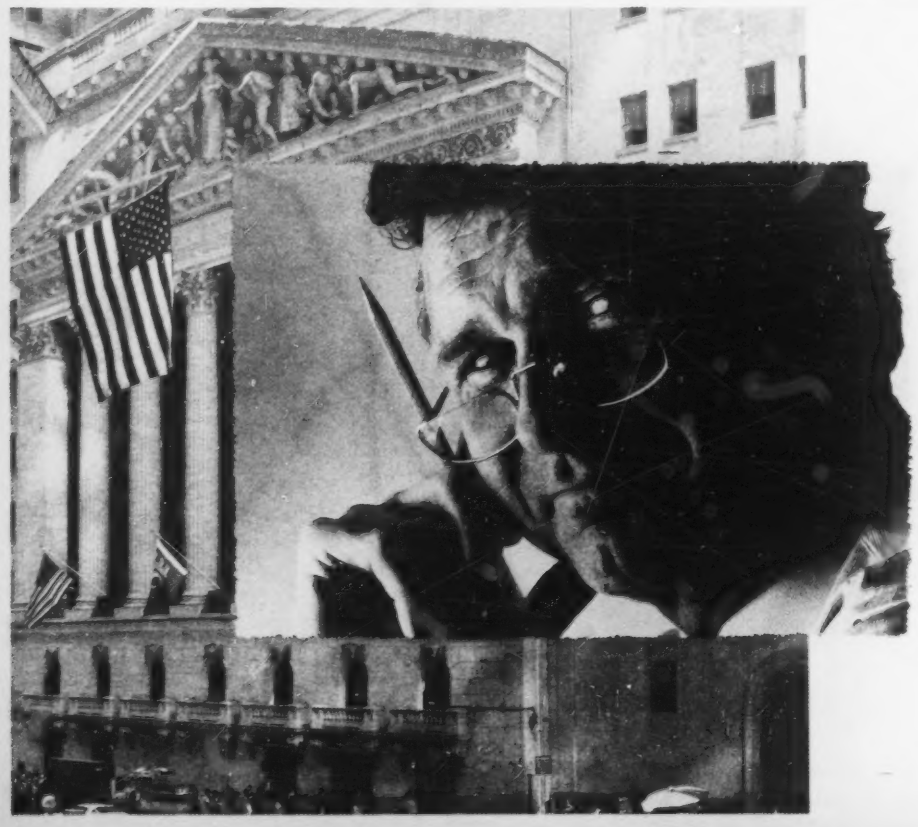
Dreyfus Management Inc.
767 Fifth Ave., New York, N.Y. 10153; (212) 715-6454

Total assets managed	$1,496,000,000
Total discretionary	$1,496,000,000
Total tax-exempt assets	$1,496,000,000
Total discretionary tax-exempt	$1,496,000,000
Mortgage-backed assets	$284,000,000
Tax-exempt clients	46
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	3

Dreyfus Management Inc. is an active equity, active fixed-income, balanced and short-term manager.
Its value-oriented, low p/e and contrarian equity approach blends top-down/bottom-up styles with stock selection and asset mix decisions being the most important, followed by industry or sector weight.
Its primary fixed-income approach is based on maturity or duration management. Using high-quality short/intermediate issues, the maximum average maturity is 10 years, with normal average maturity equal to the risk-adjusted peak of the yield curve.
The asset mix Jan. 1 was 14% stocks, 57% bonds, 10% cash and 19% mortgage-backed securities.
The firm follows 200 stocks closely and 7,000, generally; 95% of the research is generated internally.
The parent is The Dreyfus Corp.
Peter A. Santoriello is chief investment officer; Edward V. Arbaugh III is client contact.

Dreyfus Realty Advisors Inc.
1180 Avenue of the Americas, New York, N.Y. 10036; (212) 764-3210

Total assets managed	$570,000,000
Total discretionary	$570,000,000



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Total tax-exempt assets	$576,000,000
Total discretionary tax-exempt	$570,000,000
Equity real estate assets	$535,000,000
Mortgage assets	$35,000,000
Tax-exempt clients	2
Types of accounts managed	C
Minimum separate account	$10,000,000

Dreyfus Realty Advisors Inc., a real estate manager, uses an opportunistic approach with investment decisions based on a broad assessment of economic and capital market trends and real estate conditions.

The asset mix Jan. 1 was 93.9% equity real estate and 6.1% convertible mortgages.

The parent is Dreyfus Corp.

Francis X. Tansey is chief investment officer; Paul McEvoy is client contact.

Duff & Phelps Investment Management Co.

55 E. Monroe St., Suite 3800, Chicago, Ill. 60603; (312) 368-5509

Total assets managed	$10,437,000,000
Total discretionary	$10,437,000,000
Total tax-exempt assets	$10,437,000,000
Discretionary tax-exempt	$10,437,000,000
Mortgage-backed assets	$2,000,000,000
401(k)/457 assets managed	$5,391,000,000
Tax-exempt clients	151
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	18
Size of research staff	100

Duff & Phelps Investment Management Co. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach employs bottom-up research, emphasizing stocks with low p/e multiples, high-dividend income and above-average return on equity. Graham & Dodd analysis is used.

Its fixed-income approach stresses preservation of capital and generation of income using high-quality issues. Maturity distribution is based on interest rate forecasts.

The asset mix Jan. 1 was 21% stocks, 60% bonds and 19% mortgage-backed securities.

The firm follows 140 stocks closely and 120, generally; 90% of the research is generated internally.

The parent is Duff & Phelps Inc.

Tim Norman is client contact.

Duncan-Hurst Capital Management

4370 La Jolla Village Drive, Suite 600, San Diego, Calif. 92122; (619) 546-4930

Total assets managed	$166,000,000
Total discretionary	$166,000,000
Total tax-exempt assets	$166,000,000
Total discretionary tax-exempt	$166,000,000
401(k)/457 assets managed	$9,000,000
Tax-exempt clients	7
Types of accounts managed	CFG
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	2

Duncan-Hurst Capital Management, an active equity manager, uses a combination of bottom-up stock selection and top-down analysis. The firm focuses on equities that exhibit accelerating earnings and rising relative price strength and are positioned in strong industries.

The asset mix Jan. 1 was 99% stocks and 1% cash.

The firm follows 120 stocks closely and 500, generally; 10% of research is generated internally.

William H. Duncan Jr. is chief investment officer; Frank P. Hurst is client contact.

Dunedin Fund Managers Ltd.

Dunedin House, 25 Ravelston Terrace, Edinburgh, U.K. EH4 3EX; 44-31-315-2500

Total assets managed	$4,678,000,000
Total discretionary	$4,678,000,000
Total tax-exempt assets	$316,000,000
Total discretionary tax-exempt	$316,000,000
International equity assets	$223,000,000
International fixed-income	$56,000,000
International cash assets	$31,000,000
Tax-exempt clients	7
Types of accounts managed	CEG
Minimum separate account	$10,000,000
No. of portfolio managers	21
Size of research staff	10

Dunedin Fund Managers Ltd. is an active international/global equity and fixed-income manager.

Its equity approach includes country/currency and stock selection decisions. Stock selection uses a systematic screening system emphasizing value and momentum criteria. Options are used.

Its fixed-income approach uses a systematic screening model emphasizing real yield, risk premium, price, currency and quality criteria.

The asset mix Jan. 1 was 72% stocks, 18% bonds and 10% cash.

The firm follows 500 stocks closely and 2,100, generally; 80% of research is generated internally.

The Bank of Scotland has a 50.5% ownership in the firm.

Alan S. Kemp is chief investment officer; Douglas B. Waggoner is client contact at (514) 499-9348.

E

Eads & Heald Investment Counsel

5770 Powers Ferry Road N.W., Suite 304, Atlanta, Ga. 30327; (404) 988-9556

Total assets managed	$21,000,000
Total discretionary	$21,000,000
Total tax-exempt assets	$6,000,000
Total discretionary tax-exempt	$6,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	19
Types of accounts managed	CF
Minimum separate account	$100,000
No. of portfolio managers	2

Eads & Heald Investment Counsel is an active equity and balanced manager.

The firm uses a top-down, fundamental approach that emphasizes quality growth stocks. The portfolios are biased toward established growth companies with broad diversification.

Its fixed-income approach is passive, emphasizing high-quality corporate and government securities. The firm focuses on short- to intermediate-term securities and ladders the maturities.

The asset mix Jan. 1 was 84% stocks, 7% bonds and 9% cash.

The firm follows 350 stocks closely and 500, generally; 20% of the research is generated internally.

R. Stewart Eads is chief investment officer; Thomas F. Heald is client contact.

Eagle Asset Management

880 Carillon Parkway, St. Petersburg, Fla. 33716; (800) 237-3101

Total assets managed	$3,918,000,000
Total discretionary	$3,918,000,000
Total tax-exempt assets	$3,064,000,000
Total discretionary tax-exempt	$3,064,000,000
401(k)/457 assets managed	$39,000,000
Tax-exempt clients	81
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	2

Eagle Asset Management, an active equity manager, relies heavily on cash flow analysis. The firm invests primarily in non-technology growth stocks with a significant value component.

The asset mix Jan. 1 was 76% stocks, 2% bonds and 22% cash.

The firm follows 75 stocks closely and 150, generally; 75% of research is generated internally.

The parent is Raymond James Financial Inc.

Herbert E. Ehlers is chief investment officer; Lincoln Kinnicutt is client contact.

Eagle Capital Management

530 Fifth Ave., New York, N.Y. 10036; (212) 768-0700

Total assets managed	$100,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$17,000,000
Total discretionary tax-exempt	$17,000,000
Tax-exempt clients	6
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	2

Eagle Capital Management, an active equity manager, uses a selection process that combines fundamental analysis with original research. Growth stock portfolios are characterized by quality companies and managements with a long-term perspective. Strict valuation disciplines are employed to reduce risk.

The asset mix Jan. 1 was 60% stocks and 40% cash.

The firm follows 50 to 60 stocks closely and 300 to 400, generally; 50% of research is generated internally.

Ravenel B. Curry III is chief investment officer; Joseph W. Griffin is client contact.

Eaton Vance Management

24 Federal St., Boston, Mass. 02110; (617) 482-8260

Total assets managed	$7,583,000,000
Total discretionary	$7,430,000,000
Total tax-exempt assets	$1,088,000,000
Total discretionary tax-exempt	$1,038,000,000
Tax-exempt clients	78
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	20
Size of research staff	22

Eaton Vance Management is an active equity, active fixed-income, balanced and short-term manager.

The firm's equity style relies on fundamental bottom-up analysis performed by an internal research staff. While maintaining a growth bias to its stock selection, other issues often will be used.

Its fixed-income approach seeks to achieve superior returns while preserving capital and reducing portfolio volatility. Although moderate interest rate anticipation and sector rotation are practiced, heavy emphasis is placed on convexity analysis using put bonds.

Options are used.

The asset mix Jan. 1 was 59.1% stocks, 26.5% bonds and 14.4% cash.

The firm follows 400 stocks closely and 3,000, generally; 90% of research is generated internally.

The parent is Eaton Vance Corp.

Peter F. Kiely is chief investment officer; James M. Frost is client contact.

Edgecombe Properties Ltd.

655 Bay St. Suite 1200, Toronto, Ontario M5G 2K4; (416) 351-2835

Total assets managed	$804,000,000
Total discretionary	$804,000,000
Total tax-exempt	$173,000,000
Total discretionary tax-exempt	$173,000,000
For subsidiaries of U.S. firms	$6,000,000
Equity real estate assets	$173,000,000
Tax-exempt clients	74
U.S. subsidiaries	3
Types of accounts managed	CEFGU
Minimum separate account	$25,000,000
No. of portfolio managers	5
Size of research staff	4

Edgecombe Properties Ltd., a Canadian firm, is a real estate manager.

It stresses proactive asset management using property development, expansion, renovation, conversion of use and leasing/re-leasing capabilities to enhance a property's value beyond general market increases.

All assets were in equity real estate Jan. 1.

The parent is North American Life Assurance.

J. Douglas Bryden is chief investment officer; Michael Walsh is client contact.

Edgewood Management Co.

675 Third Ave., New York, N.Y. 10017; (212) 687-7480

Total assets managed	$450,000,000
Total discretionary	$95,000,000
Total tax-exempt assets	$37,000,000
Total discretionary tax-exempt	$37,000,000
International equity assets	$500,000
Tax-exempt clients	19
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Edgewood Management Co. is an active equity, active fixed-income and balanced manager.

Its equity approach stresses growth stocks; its fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 47% stocks, 32.5% bonds and 20.5% cash.

The firm follows 50 stocks closely and 100, generally; 80% of research is generated internally.

William C. Breed III is chief investment officer; Nicholas A. Stephens is client contact.

The master trust/custody and global custody directory will be published in the Oct. 14 issue of *Pensions & Investments*.

Elliott & Page Investment Counsel

120 Adelaide St. W., Suite 1120, Toronto, Ontario M5H 1V1; (416) 365-8300

Total assets managed	$4,317,000,000
Total discretionary	$4,317,000,000
Total tax-exempt assets	$772,000,000
Total discretionary tax-exempt	$772,000,000
Types of accounts managed	CEFU
Minimum separate account	$3,000,000
No. of portfolio managers	9

Elliot & Page Investment Counsel, a Canadian firm, is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach targets the sectors with the best anticipated returns, then overweights those sectors expected to outperform the TSE 300. Portfolios typically will be invested in at least 10 sectors, with a maximum commitment to a single sector of 30%. Stock selection within each sector is concentrated on high-liquidity, large-cap, blue-chip stocks. The approach is price sensitive.

Its fixed-income portfolios are constructed around an interest rate outlook for a three- to six- month period. Issue quality and liquidity are dominant characteristics of the portfolios. The firm relies exclusively on Canadian government issues.

It follows 60 to 80 stocks closely and 200, generally; 20% of research is generated internally.

The parent is North American Life.

Morton Patrontasch is chief investment officer; Ian H. Taylor is client contact.

Emerging Markets Management/Emerging Markets Investors Corp.

2000 K St. N.W., Suite 400, Washington D.C. 20006; (202) 785-4100

Total assets managed	$402,000,000
Total discretionary	$402,000,000
Total tax-exempt assets	$255,000,000
Total discretionary tax-exempt	$255,000,000
International equity assets	$182,000,000
International cash assets	$73,000,000
Tax-exempt clients	14
Types of accounts managed	CEFJ
Minimum separate account	$15,000,000
No. of portfolio managers	3
Size of research staff	4

Emerging Markets Management/Emerging Markets Investors Corp., an active international/global equity manager, uses a quantitative approach, focusing on value and growth.

The asset mix Jan. 1 was 71% bonds and 29% cash.

The firm follows 300 stocks closely and 1,500, generally; 95% of the research is generated internally.

Antoine W. Van Agtmael is chief investment officer and client contact.

EMG Advisors Inc.

57 Unquowa Road, Fairfield, Conn. 06430; (203) 255-5701

Total assets managed	$110,000,000
Total discretionary	$110,000,000
Total tax-exempt assets	$103,000,000
Total discretionary tax-exempt	$103,000,000
Mortgage-backed assets	$76,000,000
401(k)/457assets managed	$5,000,000

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Tax-exempt clients	9
Types of accounts managed	CGJ
Minimum separate account	$5,000,000
No.of portfolio managers	1
Size of research staff	2

EMG Advisors Inc. is an active fixed-income manager that invests in U.S. Treasury and mortgage-backed securities. The firm allocates funds between fixed- and variable-rate securities as a function of the yield curve and the trend of interest rates.

The asset mix Jan. 1 was 4% bonds, 22% cash equivalents and 74% mortgage-backed securities.

William H. Hatch III is chief investment officer and client contact.

Emprise Bank N.A.

P.O. Box 1488, Hutchinson, Kan. 67501-1488; (316) 662-0561

Total assets managed	$205,000,000
Total discretionary assets	$115,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
401(k)/457 plan assets	$3,000,000
Tax-exempt clients	42
Types of accounts managed	CEFGJ
Minimum separate account	$100,000
No.of portfolio managers	5
Size of research staff	3

Emprise Bank is an active equity and fixed-income, balanced, short-term and tactical asset allocation manager.

Its value-oriented equity approach is top-down using Graham & Dodd analysis and sector rotation. Out-of-favor equities are emphasized. Its fixed-income approach is uses interest rate anticipation and anticipation of yield curve changes. Options and financial futures are used.

The asset mix Jan. 1 was 30% stocks, 60% bonds and 10% cash.

The bank follows 19 stocks closely and 143, generally; 60% of research is generated internally.

Dale E. Page is chief investment officer and client contact.

Roger Engemann & Associates Inc.

600 N. Rosemead Blvd., Pasadena, Calif. 91107; (818) 351-9686

Total assets managed	$864,000,000
Total discretionary	$864,000,000
Total tax-exempt assets	$357,000,000
Total discretionary tax-exempt	$357,000,000
Tax-exempt clients	3,003
Types of accounts managed	CEFJ
Minimum separate account	$100,000
No. of portfolio managers	4
Size of research staff	4

Roger Engemann & Associates Inc. is an active equity and balanced manager that uses fundamental research to find companies with strong management, a sound business plan and superior potential for earnings growth.

The asset mix Jan. 1 was 90% stocks and 10% cash.

The firm follows 75 stocks closely and 150, generally; all research is generated internally.

Roger Engemann is chief investment officer; James C. Kemp, Stephen Ascher, William P. Richards Jr. and Tod Parrott are client contacts.

Equitable Agri-Business Inc.

1040 Crown Pointe Parkway, Atlanta, Ga. 30338; (404) 551-2700

Total assets managed	$2,200,000,000
Total discretionary	$2,200,000,000
Total tax-exempt assets	$726,000,000
Total discretionary tax-exempt	$726,000,000
Equity real estate assets	$59,000,000
Mortgage assets	$667,000,000
Types of accounts managed	C
Minimum separate account	$20,000,000
No. of portfolio managers	1
Size of research staff	2

Equitable Agri-Business Inc., a real estate manager, uses careful selection of prime income-producing agricultural properties with geographic, property and crop diversification, including citrus groves, orchards, vineyards, timberlands, farms and ranches.

The asset mix Jan. 1 was 92% mortgages and 8% equity real estate.

About 50% of the research is generated internally.

The parent is Equitable Real Estate Investment Management Inc.

Edwin J. Brown is chief investment officer; Joyce W. Niggley is client contact.

Equitable Capital Management Corp.

1285 Avenue of the Americas, New York, N.Y. 10019; (212) 382-8103

Total assets managed	$33,225,000,000
Total discretionary assets	$33,204,000,000
Total tax-exempt assets	$24,077,000,000
Discretionary tax-exempt	$24,064,000,000
Equity real estate assets	$67,000,000
International equity assets	$48,000,000
Equity indexed assets	$30,000,000
Mortgage-backed assets	$2,581,000,000
Private placement assets	$7,706,000,000
401(k)/457 assets managed	$800,000,000
Tax-exempt clients	500
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	28
Size of research staff	18

Equitable Capital Management Corp. is an active and passive equity, active and passive fixed-income, balanced, real estate, active international/global equity and fixed-income, short-term, private placement and convertible manager.

The firm's investment approach is client-driven, problem solving because each plan differs in liability structure, risk tolerance and asset mix. It uses traditional and non-traditional management techniques and products.

The asset mix Jan. 1 was 20% stocks, 28% bonds, 8% cash, 11% mortgage-backed securities and 33% direct placements.

The parent is Equitable Life Assurance Society of the United States.

Brian F. Wruble is chief investment officer; Joseph Briggs is client contact.

Equitable Real Estate Investment Management

787 Seventh Ave., Area 46-K, New York, N.Y. 10019; (212) 554-4213

Total assets managed	$34,666,000,000
Total discretionary	$34,666,000,000
Total tax-exempt assets	$18,586,000,000
Discretionary tax-exempt	$18,586,000,000
Equity real estate assets	$12,382,000,000
Mortgage assets	$6,204,000,000
401(k)/457 assets managed	$25,000,000
Tax-exempt clients	290
Types of accounts managed	CG
Minimum separate account	$100,000,000
No. of portfolio managers	14
Size of research staff	5

Equitable Real Estate Investment Management Inc., a real estate manager, combines hands-on knowledge of local experts with the discipline of national oversight.

The asset mix Jan. 1 was 72.1% equity real estate and 27.9% mortgages.

The parent is Equitable Life Assurance Society.

George R. Puskar is chief investment officer; Paul J. Dolinoy is client contact.

Equity Investment Corp.

5180 Roswell Road, Suite 203-S, Atlanta, Ga. 30342; (404) 250-9565

Total assets managed	$30,000,000
Total discretionary	$30,000,000
Total tax-exempt assets	$17,000,000
Total discretionary tax-exempt	$17,000,000
401(k)/457 assets managed	$100,000
Tax-exempt clients	33
Types of accounts managed	CEFJ
Minimum separate account	$250,000
No. of portfolio managers	1

Equity Investment Corp., an active equity manager, follows a strict investment discipline using a computerized valuation methodology based on principles espoused by W. Buffet. The use of this model leads to the ownership of companies with high returns on equity, high growth, low debt and low p/es.

The asset mix Jan. 1 was 84.9% stocks and 15.1% cash.

The firm follows 50 stocks closely and 150, generally; all research is generated internally.

James F. Barksdale is chief investment officer and client contact.

ERIAC Inc.

555 Madison Ave., New York, N.Y. 10022; (212) 371-3950

Total assets managed	$40,000,000
Total discretionary	$40,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
Tax-exempt clients	60
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	3

ERIAC Inc. is an active equity, passive fixed-income, balanced and short-term manager.

Its equity approach evaluates earnings, corporate management and growth opportunities, and uses fundamental analysis. Its primary fixed-income position is passive; however, interest rate anticipation is used for timing and maturity decisions.

The asset mix Jan. 1 was 35% stocks, 25% bonds and 40% cash.

The firm follows 10 stocks closely and 30, generally; 50% of research is generated internally.

The parent is The Herold Group Inc.

Bernard Herold is chief investment officer; Lawrence S. Herold is client contact.

Estabrook Capital Management Inc.

430 Park Ave., New York, N.Y. 10022; (212) 319-4343

Total assets managed	$725,000,000
Total discretionary	$725,000,000
Total tax-exempt assets	$535,000,000
Total discretionary tax-exempt	$535,000,000
401(k)/457 assets managed	$40,000,000
Tax-exempt clients	191
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	7

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

Estabrook Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its value approach to equities stresses selection based on projections of total return over a stock market cycle. Emphasis is on potential growth in earnings and dividends, underlying asset worth and fundamental value.

Its fixed-income approach uses interest rate anticipation, limiting investments to government and government-guaranteed issues, and to corporates and municipals rated A or higher.

The asset mix Jan. 1 was 60% equities, 30% bonds and 10% cash.

Charles T. Foley is chief investment officer; William C. Petty III is client contact.

EverGreen Capital Management Inc.

10250 Regency Circle, Suite 200, Omaha, Neb. 68114; (402) 392-7834

Total assets managed	$13,000,000
Total discretionary	$13,000,000
Total tax-exempt assets	$11,000,000
Total discretionary tax-exempt	$11,000,000
Tax-exempt clients	2
Types of accounts managed	CF
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	1

EverGreen Capital Management Inc. is an active equity and balanced manager.

Its equity style is value oriented, using Graham & Dodd analysis. It uses factors such as low p/e, low debt to capital, price to book value, and free cash flow to screen stocks.

The asset mix Jan. 1 was 88% stocks, 7% bonds and 5% cash.

The firm follows 30 to 40 stocks closely and 60, generally; 30% to 40% of the research is generated internally.

Michael L. Green is chief investment officer and client contact.

Ewing Capital Inc.

1110 Vermont Ave. N.W., Suite 1170, Washington, D.C. 20006; (202) 463-8787

Total assets managed	$11,000,000
Total discretionary	$9,000,000
Total tax-exempt assets	$9,000,000
Total discretionary tax-exempt	$9,000,000
Tax-exempt clients	1
Types of accounts managed	G
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	3

Ewing Capital Inc., an active equity manager, uses the market monitor investment management system, a quantitative approach using total expected return and relative strength.

The firm follows 50 stocks closely and 1,700, generally; 90% of research is generated internally.

Samuel D. Ewing Jr. is chief investment officer and client contact.

Executive Investment Advisors Inc.

232 West Avenida Valencia, San Clemente, Calif. 92672; (714) 361-3311

Total assets managed	$150,000,000
Total discretionary	$150,000,000
Total tax-exempt assets	$60,000,000
Total discretionary tax-exempt	$60,000,000
International fixed-income	$5,000,000
Tax-exempt clients	14
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	4

Executive Investment Advisors Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis, buying companies at large discounts to true value. It uses fundamental analysis to select small- to medium-cap companies that are leaders in their market niche.

Its fixed-income approach is eclectic, preserving capital through sector, spread, quality and yield curve analysis. It invests in high-grade corporates, foreign and special situation bonds.

Options and stock index futures are used.

The asset mix Jan. 1 was 55% stocks, 35% bonds and 10% cash.

The firm follows 150 stocks closely and 450, generally; 40% of the research is generated internally.

Tarey R. Gabriele is chief investment officer; Jim Scholz is client contact.

F

Federated Investment Counseling

Federated Investors Tower, Pittsburgh, Pa. 15222; (412) 288-6542

Total assets managed	$896,000,000
Total discretionary	$896,000,000
Total tax-exempt assets	$854,000,000
Total discretionary tax-exempt	$854,000,000
401(k)/457 assets managed	$68,000,000
Tax-exempt clients	52
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	6

Federated Investment Counseling is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, concentrating on large-cap, high-quality stocks with a moderate asset allocation decision.

Its fixed-income accounts are managed with a duration target and a government/corporate upgrade/downgrade decision.

The asset mix Jan. 1 was 41% stocks, 50% bonds and 9% cash.

The firm follows 100 stocks closely and 1,000 generally; 70% of research is generated internally.

The parent is Federated Investors.

Henry J. Gailliot is chief investment officer; James H. O'Leary is client contact.

Fenimore Asset Management

P.O. Box 310, Cobleskill, N.Y. 12043; (518) 234-4393

Total assets managed	$63,000,000
Total discretionary	$62,000,000
Total tax-exempt assets	$15,000,000
Total discretionary tax-exempt	$15,000,000
Tax-exempt clients	60
Types of accounts managed	CF
Minimum separate account	$300,000
No. of portfolio managers	2

Fenimore Asset Management is an active equity and balanced manager.

Its equity approach is value-oriented with a long-term focus, using quantitative techniques and focusing on growth stocks. Its fixed-income approach, based on interest rate anticipation, is to invest in bonds with ratings of A or better and maturities of two to five years.

The asset mix Jan. 1 was 77.2% stocks, 16.4% bonds and 6.4% cash.

The firm follows 70 stocks closely and 200, generally; all research is generated internally.

Thomas O. Putnam and Diane C. Van Buren are chief investment officers; George Chelius is client contact.

Ferguson Investment Consultants Inc.

528 Bellwood Ave., North Tarrytown, N.Y. 10591; (914) 631-7188

Total assets managed	$7,000,000
Total discretionary	$7,000,000
Total tax-exempt assets	$2,000,000
Total discretionary tax-exempt	$2,000,000
International equity assets	$100,000
International fixed-income	$100,000
Tax-exempt clients	12
Types of accounts managed	C
Minimum separate account	$100,000
No. of portfolio managers	1

Ferguson Investment Consultants Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is based on fundamental, value-oriented analysis combined with quantitative inputs.

Its fixed-income approach is based on risk/return analysis from long-term interest rate trends. The firm evaluates quality and corporate liquidity to assess the attractiveness of higher yielding securities.

The asset mix Jan. 1 was 49% stocks, 22% fixed-income and 29% cash.

The firm follows 30 stocks closely and 50, generally; 65% of research is generated internally.

Douglas E. Ferguson is chief investment officer and client contact.

Investment software: Sept. 2.

25 largest equity indexers

Firm	$ mils.*
Wells Fargo Nikko	44,507
Bankers Trust	36,576
Mellon Capital	23,390
State Street Bank	19,998
ANB Investment	8,517
Alliance Capital	6,286
GE Investments	3,882
PanAgora Asset	3,497
Dimensional Fund	3,030
Wilshire Asset	2,852
Manufacturers Nat'l/Detroit	2,700
Vanguard Group	1,738
Chase Investors	1,528
Prudential Diversified	1,503
BEA Associates	1,300
Advanced Investment	1,200
Northern Trust	1,097
Chancellor Capital	969
Sears Investment	937
Pacific Investment	917
Aetna Life	849
Axe-Core Investors	848
Travelers	808
NCNB	650
Metropolitan	596
Total	**170,175**

*Discretionary tax-exempt assets

Ferguson, Wellman, Rudd, Purdy & Van Winkle Inc.

1001 S.W. Fifth St., Suite 1919, Portland, Ore. 97204; (503) 226-1444

Total assets managed	$585,000,000
Total discretionary	$585,000,000
Total tax-exempt assets	$450,000,000
Total discretionary tax-exempt	$450,000,000
401(k)/457 assets managed	$6,000,000
Tax-exempt clients	85
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	7

Ferguson, Wellman, Rudd, Purdy & Van Winkle Inc. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its primary equity approach is disciplined, using Graham & Dodd principles, low p/e stocks and sector rotation. Value is emphasized, focusing on companies with a potential for earnings growth and dividend increases.

Its primary fixed-income approach uses interest rate anticipation and sector analysis, with portfolios structured to emphasize maturities, relative value between sectors and quality levels.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

The firm follows 100 stocks closely and 300, generally; 15% of the research is generated internally.

Norbert Wellman is chief investment officer; Steve Holwerda is client contact.

FFCA Institutional Advisors

17207 N. Perimeter Drive, Scottsdale, Ariz. 85255; (602) 947-8447

Total assets managed	$1,200,000,000
Total discretionary	$1,200,000,000
Total tax-exempt assets	$250,000,000
Total discretionary tax-exempt	$250,000,000
Mortgage assets	$250,000,000
401(k)/457 assets managed	$19,000,000
Tax-exempt clients	16
Types of accounts managed	CFG
Minimum separate account	$50,000,000
No. of portfolio managers	3
Size of research staff	4

FFCA Institutional Advisors Inc., a real estate manager, emphasizes high current income yields from unleveraged commercial real estate employed by fundamental industries.

The asset mix Jan. 1 was 100% hybrid debt.

Robin Roach is chief investment officer; Thomas K. Crawford is client contact.

Fidelity Institutional Retirement Services

82 Devonshire St., Boston, Mass. 02109; (617) 570-6161

See entry for FIDELITY INVESTMENTS.

Fidelity Investments Tax Exempt Services

82 Devonshire St., Boston, Mass. 02109; (617) 570-5643

See entry for FIDELITY INVESTMENTS.

Fidelity Investments

82 Devonshire St., Boston, Mass. 02109; (617) 570-7000

Total assets managed	$118,803,000,000
Total discretionary	$118,803,000,000
Total tax-exempt assets	$28,960,000,000
Discretionary tax-exempt	$28,960,000,000
Equity real estate assets	$4,000,000
International equity assets	$954,000,000
International fixed-income	$22,000,000
Equity indexed assets	$470,000,000
Fixed-income indexed assets	$594,000,000
Dedicated/immunized assets	$269,000,000
Mortgage-backed assets	$157,000,000
401(k)/457 assets managed	$10,217,000,000
Tax-exempt clients	13,500
Types of accounts managed	CEFGJ
Minimum separate account	$25,000,000
No. of portfolio managers	92
Size of research staff	133

Fidelity Investments is an active and passive domestic equity and fixed-income, active international equity and fixed-income, balanced and short-term manager.

The parent is FMR — Fidelity Investments.

Edward C. Johnson III is the chairman and chief executive officer of the parent company. The assets of the following subsidiaries are included here.

- Fidelity Management Trust Co. manages $7.711 billion in discretionary tax-exempt assets. The firm offers equity, fixed-income, international, global and balanced styles. Seven equity styles are offered: income-managed, earnings growth, select broad market, select small-cap, select international, special equity and balanced. FMT also offers four fixed-income investment styles: dynamic maturity allocation, targeted active management, high yield bond and distressed bond.

Alexander Webb III is president; Eugene Waldron Jr. is client contact.

- Fidelity Institutional Retirement Services manages $18.249 billion in discretionary tax-exempt assets for corporate defined-contribution plans. The firm provides investment management, record keeping and employee communication services.

Robert Reynolds is president; James V. Bowhers is client contact.

- Fidelity Investments Tax Exempt Services Co. manages $3 billion in discretionary tax-exempt assets for non-profit institutions. The firm pro... both retirement and asset management service...

Richard Malconian is president; Tom Bieniek is client contact.

Fidelity Management Trust

82 Devonshire St., Boston, Mass. 02109; (617) 570-6161

See entry for FIDELITY INVESTMENTS.

Fiduciary Capital Management Inc.

51 Sherman Hill Road, Cornerstone Professional Park, Suite A-204, P.O. Box 893, Woodbury, Conn. 06798; (203) 266-0440

Total assets managed	$1,250,000,000
Total discretionary	$400,000,000
Total tax-exempt assets	$400,000,000
Total discretionary tax-exempt	$400,000,000
401(k)/457 assets managed	$400,000,000
Tax-exempt clients	30
Types of accounts managed	C
Minimum separate account	$20,000,000
No. of portfolio managers	2
Size of research staff	3

Fiduciary Capital Management is a short-term, GIC and BIC manager.

Its approach emphasizes high quality, using maturity ladders and duration shifts. The firm uses a highly-disciplined, low-risk GIC portfolio management style that achieves optimal investment performance tailored to plan needs. It structures portfolios to manage exposure to interest rate movement and reinvestment risk.

As of Jan. 1 the asset mix was 5% cash and 95% GICs/BICs.

Peter E. Bowles is chief investment officer; Kevin J. Sullivan is client contact.

Fiduciary Counsel Inc.

40 Wall Street, New York, N.Y. 10005; (212) 344-6400

Total assets managed	$399,000,000
Total discretionary	$399,000,000
Total tax-exempt assets	$50,000,000
Total discretionary tax-exempt	$50,000,000
Tax-exempt clients	40
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	3

Fiduciary Counsel Inc. is an active and passive equity, active and passive fixed-income, balanced and tactical asset allocation manager.

Its equity approach uses growth stocks, emerging growth stocks, sector rotation and tactical asset allocation.

The asset mix Jan. 1 was 45% stocks, 50% bonds and 5% cash.

The firm follows 100 stocks closely and 50, generally; 80% of research is generated internally.

The parent is Associated Family Services Inc.

Andrew E. Beer is chief investment officer; Annmarie C. Volpe and Jack R. Orben are client contacts.

Fiduciary Management Associates

55 W. Monroe, Suite 2550, Chicago, Ill. 60603; (312) 930-6850

Total assets managed	$1,046,000,000
Total discretionary	$1,002,000,000
Total tax-exempt assets	$951,000,000
Total discretionary tax-exempt	$925,000,000
Mortgage-backed assets	$28,000,000
401(k)/457 assets managed	$22,000,000
Tax-exempt clients	101
Types of accounts managed	CEFGJ
Minimum balanced account	$2,000,000
Minimum separate equity account	$1,000,000
Minimum separate bond account	$1,000,000
No. of portfolio managers	7

Fiduciary Management Associates is an active equity, active fixed-income and balanced manager.

Emphasizing growth and low p/e stocks and sector rotation, it is a top-down macroeconomic equity manager, investing in well managed, value-oriented companies. Basing its fixed-income approach on interest rate anticipation and sector analysis, it uses top-down management, varying sector analysis and taking advantage of interest rate changes and yield spread variations.

The asset mix Jan. 1 was 40% stocks, 37% bonds, 20% cash and 3% mortgage-backed securities.

The firm follows 100 stocks closely and 500, generally; 35% of the research is generated internally.

The parent is United Asset Management.

Philip E. Arnold is chief investment officer; Robert F. Carr III is client contact.

Fiduciary Trust Co. International

2 World Trade Center, New York, N.Y. 10048; (212) 466-4100

Total assets managed	$10,067,000,000
Total discretionary	$10,067,000,000
Total tax-exempt assets	$5,639,000,000
Total discretionary tax-exempt	$5,639,000,000
International equity assets	$80,000,000
International fixed-income	$1,052,000,000
International cash assets	$162,000,000
Fixed-income indexed assets	$379,000,000
401(k)/457 assets managed	$126,000,000
Tax-exempt clients	181
Types of accounts managed	CEFGJ
Minimum separate account	$3,000,000
No. of portfolio managers	46
Size of research staff	8

Fiduciary Trust Co. International is an active domestic and international equity and fixed-income, balanced and short-term manager.

In equities, in-house and outside research is used to identify companies expected to benefit from positive secular change. Broad investment guidelines are established, including the debt/equity ratio of portfolios and the identification of specific investment themes as well as favorable and unfavorable industries and market sectors. In fixed income, interest rate anticipation is stressed. Objectives are set by a committee and implemented by portfolio managers.

The asset mix Jan. 1 was 18% stocks, 72% bonds and 10% cash.

The firm follows 400 stocks closely and 250, generally; 70% of the research is generated internally.

Jeremy H. Biggs is chief investment officer; Cathy K. Janson is client contact.

Financial Aims Corp.

P.O. Box 5015, Great Falls, Mont. 59403; (406) 727-6111

Total assets managed	$140,000,000
Total discretionary	$140,000,000
Total tax-exempt assets	$85,000,000
Total discretionary tax-exempt	$85,000,000
International equity assets	$3,000,000
Tax-exempt clients	110
Types of accounts managed	CEF
Minimum separate account	$200,000
No. of portfolio managers	2
Size of research staff	2

Financial Aims Corp. is an active equity, active fixed-income and short-term manager.

Its equity approach uses macro- and microanalysis. The macroanalysis relies on some quantitative measurements; the micro approach is value determinant, relying on price-earnings and price-sales confirmation in addition to Z-score.

In fixed-income, it varies maturities based on economic and interest rate forecasts.

The asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash.

Robert Anton is chief investment officer; Eugene P. Lewis is client contact.

Financial Counselors Inc.

920 Main, Suite 800, Kansas City, Mo. 64105; (816) 346-6622

Total assets managed	$843,000,000
Total discretionary	$843,000,000
Total tax-exempt assets	$722,000,000
Total discretionary tax-exempt	$722,000,000
Mortgage-backed assets	$96,000,000
Tax-exempt clients	57
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	4

Financial Counselors Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented and theme driven, and uses Graham and Dodd analysis. Stocks are subjected to quantitative and technical analysis to determine whether the fundamental attraction is matched by quantitative value.

Its fixed-income approach is 70% laddered maturities and 30% interest rate anticipation. It uses an intermediate universe ranging from two to 12 years.

The asset mix Jan. 1 was 20% stocks, 64.5% bonds, 4.1% cash and 11.4% mortgage-backed securities.

The firm follows 60 to 65 stocks closely and 2,000 generally; 10% of the research is generated internally.

The parent is Kidder, Peabody & Co. Inc.

Bryant P. Barnes is chief investment officer; Graham T. Hunt is client contact.

Financial Management Advisors

345 N. Maple Drive, Suite 320, Beverly Hills, Calif. 90210; (213) 278-5888

Total assets managed	$306,000,000
Total discretionary	$297,000,000
Total tax-exempt assets	$120,000,000
Total discretionary tax-exempt	$111,000,000
401(k)/457 assets managed	$9,000,000
Tax-exempt clients	19
Types of accounts managed	CFJ
Minimum separate account	$2,000,000
No. of portfolio managers	3
Size of research staff	2

Financial Management Advisors is an active fixed-income, balanced and high-yield manager.

Its equity approach uses seven investment screens to select stocks with low risk but high potential for the long term. It uses a disciplined philosophy for consistent capital growth.

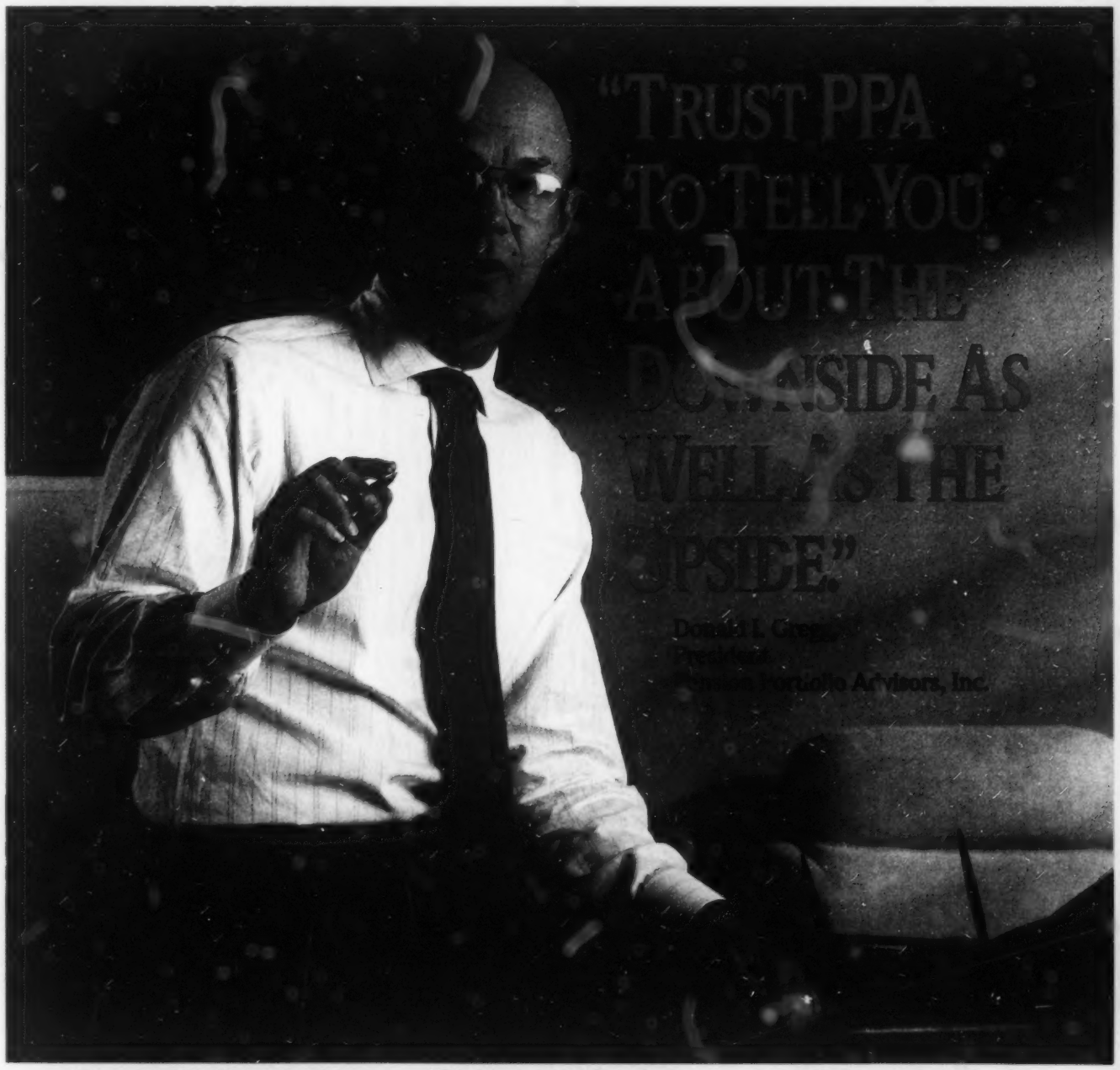
For fixed income, it uses top-down analysis and limits average maturity to 10 years. Researching economic-socio-political environments, it monitors worldwide inflation, the quality of corporate profits, the flow of funds and changes in government regulations to establish the long-term interest rate trend.

The asset mix Jan. 1 was 5.6% stocks, 92.8% bonds, 0.5% cash and 1.1% high-yield bond partnerships.

The firm follows 40 stocks closely and 200, generally.

T. Michael Graf is chief investment officer; Kenneth B. Funsten is client contact.

P&I/InterSec 300: Aug. 5.



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Financial Management & Trust Services
300 S. Grand Ave., Suite 2500, Los Angeles, Calif. 90071; (213) 229-1703

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Fine Capital Management Group Inc.
2000 Glades Road, Boca Raton, Fla., 33431; (407) 393-9700

Total assets managed	$28,000,000
Total discretionary	$28,000,000
Total tax-exempt assets	$21,000,000
Total discretionary tax-exempt	$21,000,000
Tax-exempt clients	24
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	2

Fine Capital Management Inc. is an active equity and balanced manager.

Its equity approach seeks medium-cap growth stocks with accelerating earnings that have new products, technology or a dominant position in its marketplace. Stocks also pass a screen of five valuation variables. Its fixed-income approach emphasizes high-quality debt securities using a laddered maturity but making interest rate judgments to determine the weightings.

The asset mix Jan. 1 was 35% stocks, 40% bonds and 25% cash.

The firm follows 100 stocks closely and 200, generally; 25% of the research is generated internally.

Norman D. Fine is chief investment officer and client contact.

First Alabama Bank
P.O. Box 10247, Birmingham, Ala. 35202; (205) 326-7579

Total assets managed	$2,756,000,000
Total discretionary	$1,826,000,000
Total tax-exempt assets	$719,000,000
Total discretionary tax-exempt	$547,000,000
Equity real estate assets	$1,000,000
Mortgage assets	$1,000,000
Tax-exempt clients	811
Types of accounts managed	CEFG
Minimum separate account	$100,000
No. of portfolio managers	10

First Alabama Bank is an active equity, active fixed-income, balanced and short-term manager.

In equities, it is value-oriented. Its bottom-up approach is divided into two processes: stock screening for quality and price analysis screening. In fixed-income it employs sector analysis, interest rate identification and credit analysis. It actively manages the maturity structure to produce a diversified portfolio of government, agency and high-quality corporate bonds. Fixed-income futures are used.

The asset mix Jan. 1 was 27% stocks, 66% bonds and 7% cash.

The firm follows 200 stocks closely and 750, generally.

The parent is First Alabama Bancshares Inc.

Charles S. Northen III is chief investment officer; Steve Ellis is client contact.

First Asset Management
First Bank Place East, Minneapolis, Minn. 55480; (612) 370-4479

Total assets managed	$4,360,000,000
Total discretionary	$4,320,000,000
Total tax-exempt assets	$4,018,000,000
Total discretionary tax-exempt	$4,018,000,000
Equity real estate assets	$100,000,000
Mortgage assets	$75,000,000
Equity indexed assets	$65,000,000
Dedicated/immunized assets	$100,000,000
401(k)/457 assets managed	$150,000,000
Tax-exempt clients	242
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	10

First Asset Management is an active and passive equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach is fundamental, bottom-up and value-oriented. The emphasis is on high/improving ROE with low debt, high dividend growth and low relative p/e and p/b. The investment horizon is long term and turnover is low. Its fixed-income strategy centers around fundamental interest rate forecasting within a framework for measuring and controlling both systematic and specific risk in the portfolio. Options and stock index futures are used.

Its real estate approach selects properties whose values can be enhanced through aggressive management and additional capital.

The asset mix Jan. 1 was 27% stocks, 37% bonds, 34% cash, 1% equity real estate and 1% mortgages.

The firm follows 75 stocks closely and 150, generally.

The parent is First Bank System.

John M. Murphy Jr. is chief investment officer; Kevin S. Underkofler is client contact.

First Austin Capital Management Inc.
1000 Westbank Drive, Suite 68, Austin, Texas 78746; (512) 328-9321

Total assets managed	$10,000,000
Total discretionary	$9,000,000
Total tax-exempt assets	$1,000,000
Total discretionary tax-exempt	$1,000,000
Tax-exempt clients	5
Types of accounts managed	C
Minimum separate account	$100,000
No.of portfolio managers	2

First Austin Capital Management Inc. is a balanced and tactical asset allocation manager.

Its equity approach uses top-down asset allocation to determine relative value between asset classes and bottom-up selection focusing on value and Graham & Dodd-type stocks. In fixed-income it uses long-term interest rate anticipation based on inflation outlook and economic activity.

The asset mix Jan. 1 was 30% stocks, 50% bonds and 20% cash.

The firm follows 250 stocks closely; 95% of the research is generated internally.

Guy D. Coffelt is chief investment officer.

First Coast Capital Management Inc.
200 W. Forsyth St., Jacksonville, Fla. 32202; (904) 358-2233

Total assets managed	$810,000,000
Total discretionary	$346,000,000
Total tax-exempt assets	$304,000,000
Total discretionary tax-exempt	$144,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	5
Types of accounts managed	CG
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	2

First Coast Capital Management Inc. is an active fixed-income, short-term and high-yield bond manager.

Its fixed-income approach combines interest rate anticipation, thorough credit analysis and sector and spread management to capitalize on inefficiencies within the bond market. Maturities rarely exceed 10 years.

The asset mix Jan. 1 was 85% fixed income and 15% cash.

John O. Gwynn is chief investment officer and client contact.

Who owns corporations: July 22.

First Commerce Corp. Trust Group
P.O. Box 60279, New Orleans, La. 70160; (504) 561-1606

Total assets managed	$820,000,000
Total discretionary assets	$820,000,000
Total tax-exempt assets	$450,000,000
Total discretionary tax-exempt	$450,000,000
401(k)/457 plan assets	$92,000,000
Tax-exempt clients	418
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	2

First Commerce Corp. Trust Group is an active equity, active fixed-income, balanced, short-term and tactical asset allocation manager.

Its equity approach is quantitative and bottom-up. Eight computer-aided quantitative models are used to develop a managed portfolio of 50 to 60 stocks similar in composition to the S&P 500 but of higher financial quality.

In fixed income, an intermediate-term policy is coupled with interest rate anticipation.

The bank follows 500 stocks closely and 2,000, generally; 40% of research is generated internally.

The parent is First Commerce Corp.

John C. Portwood is chief investment officer; Richard T. Hill is client contact.

First Fidelity Bancorp.
768 Broad St., Newark, N.J. 07102; (201) 430-4584

Total assets managed	$11,659,000,000
Total discretionary assets	$9,312,000,000
Total tax-exempt assets	$6,113,000,000
Total discretionary tax-exempt	$4,873,000,000
401(k)/457 plan assets	$3,051,000,000
Tax-exempt clients	1,315
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
Size of research staff	2

First Fidelity Bancorp. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is value-oriented, using growth stocks and sector rotation. The firm uses a "payback" approach that searches for relative value within a large universe of securities. For fixed-income, it manages duration around a band of an appropriate Shearson Lehman Brothers index with a specified level based on economic outlook.

The asset mix Jan. 1 was 40% stocks, 55% bonds and 5% cash.

Donald Corey is client contact.

First Interstate Bank of Arizona
100 W. Washington, Phoenix, Ariz. 85003; (602) 528-6309

Total assets managed	$3,000,000,000
Total discretionary assets	$1,800,000,000
Total tax-exempt assets	$800,000,000
Total discretionary tax-exempt	$400,000,000
401(k)/457 plan assets	$25,000,000
Tax-exempt clients	500
Types of accounts managed	CEFGJ
Minimum separate account	$300,000
No. of portfolio managers	13

First Interstate Bank of Arizona is an active equity, active fixed-income, balanced, real estate and short-term cash manager.

Its equity approach is to buy stocks, at reasonable prices, of companies with consistent records of above-average increases in earnings and dividends. Growth and emerging growth stocks are emphasized. Its fixed-income approach emphasizes construction of a high quality, conservative portfolio of diversified maturities that produces a predictable income stream and low portfolio turnover.

The asset mix Jan. 1 was 30% stocks, 60% bonds and 10% cash.

The bank follows 175 stocks closely and 250, generally; all research is generated internally.

The parent is First Interstate Bancorp.

R. Michael Sullivan is chief investment officer; Richard A. Malcomson is client contact.

First Interstate Bank California Ltd. Investment Management Division
707 Wilshire Blvd., W10-6, Los Angeles, Calif. 90017; (213) 614-5375

Total assets managed	$6,115,000,000
Total discretionary	$6,115,000,000
Total tax-exempt assets	$3,140,000,000
Total discretionary tax-exempt	$3,140,000,000
Equity real estate assets	$18,000,000
International equity assets	$10,000,000
Equity indexed assets	$100,000,000
Fixed-income indexed assets	$150,000,000
401(k)/457 assets managed	$570,000,000
Tax-exempt clients	486
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	6

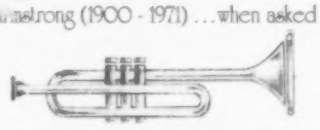
First Interstate Bank California Ltd. Investment Management Division is a active and passive domestic and international equity, active and passive domestic fixed-income, balanced, short-term, tactical asset allocation and real estate manager.

Its equity approach is quantitative, focusing on MPT, indexation and sector allocation; in global equities active country selection is used. Its active fixed-income approach concentrates on sector analysis. Options and financial futures are used.

The asset mix Jan. 1 was 18% stocks, 57% bonds and 25% cash.

"Man, if you gotta ask, you'll never know."

replied Louis Armstrong (1900 - 1971) ...when asked what jazz is



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Independence Investment Associates

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CHEAPNESS + IMPROVING FUNDAMENTALS = ATTRACTIVE STOCKS

Some Plain Talk About Defined Contribution Plans

RESPONSIBILITY

Selecting a provider for your company's 401(k) plan is a complex undertaking with far-reaching and long-lasting consequences. You bear a great responsibility to choose well. So when you select a company, or review your present providers, you will want to focus on the factors that really matter–the fundamental issues.

Employees Your first responsibility is to your company's employees because it's their financial security which is at stake. Since participants make their own investment decisions, you must ensure that all–the experienced and the novice alike–are provided with adequate education about the fundamentals of long-term investing. Employees should also be given convenient and timely access to information and the ability to change their investment line-up easily and quickly when necessary.

Your responsibility doesn't end when employees' initial selections have been made. Adequate information must also be provided as they transition through an employment career and on into retirement. The company you select should always be there for them.

Performance Of course, you want good performance. But in addition, your larger responsibility is to provide a broad, well-defined selection of investment options which provide dependable results over the long term. Your investment options–from conservative to aggressive–should be managed for specific objectives with each following a tightly prescribed and understandable investment strategy.

Partnership You strive for excellence in your own company. You should expect no less a commitment from a partner. Your administrative partner should have a deep line-up of well-trained people who will be ready to serve your needs, not only in the basics of timeliness and accuracy, but in responding to special requests. Your company is continually changing. Your partner should be flexible enough to grow and change with you.

Value You are willing to pay for quality, which does not mean excessive fees, but fair remuneration for value received. There should be no hidden assessments, no charges later on when you discover that your contract fees cover only minimum service levels. You should require full disclosure. And the same recognition of value should be present in the costs incurred by your participants for investment management and fund administration.

THE Vanguard GROUP OF INVESTMENT COMPANIES

The firm follows 280 stocks closely and 500, generally; 50% of the research is generated internally.

The parent is First Interstate Bancorp.

Alan R. Adelman is chief investment officer; Deborah Dilley is client contact.

First Interstate Bank of Oregon Capital Management Group

1300 S.W. Fifth Ave., Portland, Ore. 97005; (503) 225-2379

Total assets managed	$2,500,000,000
Total discretionary assets	$2,300,000,000
Total tax-exempt assets	$1,300,000,000
Total discretionary tax-exempt	$1,100,000,000
401(k)/457 plan assets	$150,000,000
Tax-exempt clients	450
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	12
Size of research staff	3

First Interstate Bank of Oregon Capital Management Group is an active equity, passive fixed-income, balanced and short-term manager.

For equities, it uses stocks with very low p/es. Its portfolios are structured for low risk, low portfolio beta of 0.8 to 0.9 and high yield.

Its fixed-income approach focuses on the intermediate sector. Average maturity is five to 12 years.

The asset mix Jan. 1 was 48% stocks, 45% bonds and 7% cash.

The bank follows 125 stocks closely; 50% of research is generated internally.

The parent is First Interstate Bancorp.

Dennis Wood is chief investment officer; Jan Dawson is client contact.

First Interstate Bank of Washington N.A.

P.O. Box 21927, Seattle, Wash. 98111; (206) 343-8346

Total assets managed	$5,200,000,000
Total discretionary assets	$3,400,000,000
Total tax-exempt assets	$3,400,000,000
Total discretionary tax-exempt	$3,400,000,000
401(k)/457 plan assets	$39,000,000
Tax-exempt clients	534
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	10

First Interstate Bank of Washington N.A. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach follows Graham & Dodd principles; and emphasizes low volatility, high dividend yield, high EPS stability, industrial sector shifting and large-cap stocks, with moderate concentration in sectors or issues. Its fixed-income approach emphasizes high credit quality and yield pick up swapping, with moderate emphasis on laddered maturity shifting and sector shifting.

The asset mix Jan. 1 was 51.5% stocks, 39% bonds and 9.5% cash.

The bank follows 300 stocks generally; 15% of research is generated internally.

The parent is First Interstate Bancorp.

J. Clark Reardon is chief investment officer; Lawrence T. Divers is client contact.

Financing and investing opportunities in post-1992 Europe will be examined Oct. 28.

First Investment Management Corp.

120 N. Robinson, Suite 860 W, Oklahoma City, Okla. 73162; (405) 272-4202

Total assets managed	$1,283,000,000
Total discretionary	$1,283,000,000
Total tax-exempt assets	$1,283,000,000
Total discretionary tax-exempt	$1,283,000,000
401(k)/457 assets managed	$21,000,000
Tax-exempt clients	119
Types of accounts managed	CEFG
Minimum separate account	$3,000,000
No. of portfolio managers	3
Size of research staff	2

First Investment Management Corp. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

Its equity approach uses a multifactor decision framework incorporating value, earnings and price momentum components along with distinct buy, hold and sell decision rules for each equity sector.

Its fixed-income approach is structured and involves a systematic management technique for controlling portfolio risk that can include active management and indexing on total return accounts.

The asset mix Jan. 1 was 41% stocks, 45% bonds and 14% cash.

The firm follows 100 stocks closely and 60 to 100, generally; 75% of the research is generated internally.

The parent is First Interstate Bank of Oklahoma.

C. Lee Liscom is chief investment officer; Lynn G. Horton is client contact.

First Kentucky Trust Co.

First National Tower, P.O. Box 36010, Louisville, Ky. 40202; (502) 581-5399

Total assets managed	$13,400,000,000
Total discretionary assets	$7,100,000,000
Total tax-exempt assets	$4,600,000,000
Total discretionary tax-exempt	$3,500,000,000
Real estate equity assets	$1,000,000
International equity assets	$5,000,000
Tax-exempt clients	222
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	4
Size of research staff	3

First Kentucky Trust Co. is an active and passive equity and fixed-income, balanced, real estate, active international equity and short-term manager.

Its equity approach is characterized by dynamic modeling. Using S&P weightings as a framework, the firm varies the direction of its emphasis by limited degrees. Stock selection, using fundamental and technical methods, provides added value. Its fixed-income approach is value-oriented and structured; the firm uses Shearson Lehman Brothers indexes as duration guides and varies from it by no more than 18 months. It use options.

The asset mix Jan. 1 was 28% stocks, 71% bonds and 1% equity real estate.

The bank follows 160 stocks closely and 1,000, generally; all research is generated internally.

Lawrence A. Warner is chief investment officer; Dennis W. Weihe is client contact.

First Manhattan Capital Management

437 Madison Ave., New York, N.Y. 10022; (212) 832-4736

Total assets managed	$2,450,000,000
Total discretionary	$2,450,000,000
Total tax-exempt assets	$2,450,000,000
Total discretionary tax-exempt	$2,450,000,000
Tax-exempt clients	35
Types of accounts managed	CEF
Minimum separate account	$20,000,000
No. of portfolio managers	8
Size of research staff	13

First Manhattan Capital Management, an active equity manager, emphasizes Graham & Dodd analysis and low p/e stocks in a bottom-up, risk-averse strategy. It buys companies with high returns on equities and low financial leverage at prices substantially below business values and holds positions for long-term results.

David S. Gottesman and Robert M. Howitt are chief investment officers; Gregory B. Densmore is client contact.

First Midwest Asset Management Co.

121 N. Chicago St., Joliet, Ill. 60431; (815) 740-7670

Total assets managed	$998,000,000
Total discretionary assets	$847,000,000
Total tax-exempt assets	$319,000,000
Total discretionary tax-exempt	$265,000,000
401(k)/457 plan assets	$20,000,000
Tax-exempt clients	300
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	1

First Midwest Asset Management Co. is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach emphasizes low p/e stocks. Its fixed-income approach uses laddered maturities.

The asset mix Jan. 1 was 38% stocks, 54% bonds and 8% cash.

It follows 60 stocks closely and 150, generally; 90% of research is generated internally.

The parent is First Midwest Bancorp Inc.

Paul E. Gantzert is chief investment officer; Rhonda L. Bowker is client contact.

First National Bank of Amarillo

P.O. Box 1331, Amarillo, Texas 79180; (806) 378-1968

Total assets managed	$608,000,000
Total discretionary assets	$493,000,000
Total tax-exempt assets	$253,000,000
Total discretionary tax-exempt	$207,000,000
Mortgage-backed assets	$25,000,000
Tax-exempt clients	101
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	3

First National Bank of Amarillo is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its active equity approach is value-oriented, using low p/e, high-yielding situations. Turnover is minimized to reduce transaction costs. Its active fixed-income approach uses swaps to alter average life, quality or sector exposure. Longer sectors are avoided.

The bank follows 30 stocks closely and 100, generally.

The parent is First Amarillo Bancorp.

George Cason is chief investment officer and client contact.

First National Bank of Gainesville

P.O. Drawer 937, Gainesville, Ga. 30501; (404) 536-7482

Total assets managed	$350,000,000
Total discretionary assets	$185,000,000
Total tax-exempt assets	$150,000,000
Total discretionary tax-exempt	$100,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	400
Types of accounts managed	CEFG
No. of portfolio managers	6
Size of research staff	10

First National Bank of Gainesville is an active equity, active fixed income, balanced, tactical asset allocation and short-term manager.

Its equity approach is based on tactical asset allocation. Its fixed-income approach uses sector analysis and interest rate anticipation.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

The bank follows 35 stocks closely and 30 to 40, generally.

The parent is First National Bancorp.

Joe G. Mayfield is chief investment officer and client contact.

First National Bank of Maryland

25 S. Charles St., Baltimore, Md. 21201; (301) 744-4323

Total assets managed	$1,959,000,000
Total discretionary assets	$1,959,000,000
Total tax-exempt assets	$917,000,000
Total discretionary tax-exempt	$917,000,000
Mortgage-backed assets	$22,000,000
401(k)/457 plan assets	$50,000,000
Tax-exempt clients	197
Types of accounts managed	CEFG
Minimum separate account	$500,000
No. of portfolio managers	6
Size of research staff	4

First National Bank of Maryland is an active equity, active fixed-income, short-term and balanced manager.

Its equity approach uses a growth-oriented strategy that encompasses both historical earnings trends and earnings momentum, relative p/e and lower than average volatility of returns. Its fixed-income approach is an interest rate trend strategy that focuses on the relative direction of rates and either extends or contracts average duration of the portfolio around the duration of the fixed-income index used.

The asset mix Jan. 1 was 8% stocks, 53% bonds, 15% cash and 24% mortgage-backed securities.

The bank follows 200 stocks closely and 200, generally; 40% of research is generated internally.

The parent is First Maryland Bancorp.

David K. Tuttle Jr. and Paul D. Corbin are chief investment officers; Dawson Richardson is client contact.

First National Bank of Omaha

1 First National Center, Omaha, Neb. 68103; (402) 341-0500

Total assets managed	$1,400,000,000
Total discretionary assets	$900,000,000
Total tax-exempt assets	$800,000,000
Total discretionary tax-exempt	$800,000,000
401(k)/457 plan assets	$16,000,000
Tax-exempt clients	47
Types of accounts managed	CEFGJ
Minimum separate account	$3,000,000
No. of portfolio managers	7
Size of research staff	3

First National Bank of Omaha is an active equity, active fixed-income and balanced manager.

Its equity approach, using Graham & Dodd analysis, is bottom-up, value-oriented and long term and deals with larger, seasoned companies with sound fundementals selling at reasonable prices. It uses a laddered approach to fixed income, placing about a 10% emphasis on the short or long portion based on the economic outlook. Minimum rating is A; maximum maturity is 25 years.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

The bank follows 65 stocks closely and 150, generally; 75% of research is generated internally.

The parent is First of Nebraska Inc.

Thomas Allen is chief investment officer; Milton Lackey is client contact.

First National Bank & Trust

401 E. State, Rockford, Ill. 61110; (815) 962-3771

Total assets managed	$400,000,000
Total discretionary	$300,000,000
Total tax-exempt assets	$170,000,000
Total discretionary tax-exempt	$160,000,000
Equity real estate assets	$1,000,000
Mortgage-backed assets	$4,000,000
401(k)/457 assets managed	$15,000,000
Tax-exempt clients	1,000
Types of accounts managed	EFJ
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	1

First National Bank & Trust is an active and passive domestic equity, balanced, passive bond, active international equity and short-term manager.

Its equity approach focuses on companies with earnings growth and an appropriate price level. Its fixed-income approach is passive, using a quality focus that avoids interest rate anticipation. Options and fixed-income futures are used.

Its real estate approach uses the Frank Russell real estate securities fund to ensure a broadly diversified exposure, with liquidity, to the market.

The asset mix Jan. 1 was 35% stocks, 55% bonds, 5% cash, 4% mortgage-backed securities and 1% equity real estate.

The firm follows 50 stocks closely and 300, generally; 15% of the research is generated internally.

The parent is First Community Bancorp.

Robert D. Evelsman is chief investment officer; Kevin J. Readman is the client contact.

First NH Investment Services

1 Capital Plaza, Box 528, Concord, N.H. 03302-0528; (603) 228-5575

Total assets managed	$1,400,000,000
Total discretionary	$717,000,000
Total tax-exempt assets	$156,000,000
Total discretionary tax-exempt	$127,000,000
International equity assets	$1,000,000
401(k)/457 assets managed	$130,000,000
Tax-exempt clients	217
Types of accounts managed	CEFJ
Minimum separate account	$500,000
No. of portfolio managers	7

First NH Investment Services is an active domestic and international equity, active fixed-income and balanced manager.

For equity management, quantitative analysis and

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experiential judgment support special focus on dynamic sector rotation and customized asset allocation. Its fixed-income approach structures portfolios as intermediate-term performance funds. Accounts are positioned to take advantage of turns in the economy, market, interest rates and changes in spread relationships. It uses options.

The firm follows 75 stocks closely and 500, generally; 25% of the research is generated internally.

The parent is First NH Bank.

John D. Griffiths is chief investment officer; Dan Sanders is client contact.

First Pacific Advisors Inc.

10301 W. Pico Blvd., Los Angeles, Calif. 90064; (213) 277-4900

Total assets managed	$2,493,000,000
Total discretionary	$2,493,000,000
Total tax-exempt assets	$1,763,000,000
Total discretionary tax-exempt	$1,763,000,000
Tax-exempt clients	32
Types of accounts managed	CEFG
No. of portfolio managers	4
Size of research staff	2

First Pacific Advisors Inc. is an active equity, active fixed-income and balanced manager.

It is a fundamental, disciplined, value-oriented equity investor, applying specific criteria to identify superior companies and determine attractive prices. Options rarely are used. Its primary fixed-income approach also is value-oriented.

The asset mix Jan. 1 was 60% bonds, 14% stocks, and 26% cash.

The firm follows 100 stocks closely and 300, generally; 80% of the research is generated internally.

The parent is Angeles Corp.

George H. Michaelis is chief investment officer; Lawrence P. McNeil and Daryl Ann Weber are client contacts.

First Quadrant Corp.

299 Madison Ave., Morristown, N.J. 07960; (201) 285-7119

Total assets managed	$9,174,000,000
Total discretionary	$1,562,000,000
Total tax-exempt assets	$1,398,000,000
Total discretionary tax-exempt	$1,398,000,000
International equity assets	$51,000,000
International fixed-income	$174,000,000
International cash assets	$28,000,000
International TAA	$445,000,000
401(k)/457 assets managed	$45,000,000
Tax-exempt clients	11
Types of accounts managed	CEFG
Minimum separate account	$25,000,000
No. of portfolio managers	10
Size of research staff	12

First Quadrant Corp. manages domestic and global asset allocation, active equity and fixed-income, global stock and bond, risk-controlled arbitrage and short-term investment strategies. All assets are managed using disciplined quantitative techniques and rigorous risk control.

Its asset allocation disciplines include multidisciplinary tactical asset allocation, as well as policy asset allocation control tools, both on a domestic and global basis. The equity process seeks to add value through a process of "style management," shifting from large to small and from value to growth stocks as the market and economic environment changes. Its fixed-income process is based on a pragmatic approach of shifting assets into those parts of the bond markets offering rewards disproportionate to historical norms.

The asset mix Jan. 1 was 48% stocks, 30% bonds and 22% cash.

The firm follows 1,500 stocks closely and 3,000, generally; 95% of the research is generated internally.

The parent company is Xerox Financial Services Inc.

Robert D. Arnott is chief investment officer and client contact.

First Reserve Corp.

475 Steamboat Road, Greenwich, Conn. 06830; (203) 661-6601

Total assets managed	$400,000,000
Total discretionary	$400,000,000
Total tax-exempt assets	$383,000,000
Total discretionary tax-exempt	$383,000,000
Tax-exempt clients	35
Types of accounts managed	CEG
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	1

First Reserve Corp. is a venture capital and oil and gas asset manager.

The asset mix Jan. 1 was 100% oil and gas.

All research is generated internally.

William F. Macaulay is chief investment officer; John A. Hill is client contact.

1st Source Bank, Trust & Investment Management Group

P.O. Box 1602, South Bend, Ind. 46634; (219) 236-2790

Total assets managed	$870,000,000
Total discretionary assets	$587,000,000
Total tax-exempt assets	$346,000,000
Total discretionary tax-exempt	$227,000,000
Tax-exempt clients	330
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	2

1st Source Bank, Trust & Investment Management Group is an active equity, active and passive fixed-income, balanced, and short-term manager.

It uses multiple equity management styles, all driven by a value philosophy. Options are used.

In fixed-income, it has a passive, intermediate-term philosophy, with value added by a modest level of market timing.

The asset mix Jan. 1 was 22% stocks, 63% bonds and 15% cash.

The bank follows 150 stocks closely and 300, generally; 25% of research is generated internally.

The parent is 1st Source Corp.

John S. Seidl is chief investment officer; David L. Farkas is client contact.

First Union National Bank

1200 Two First Union Center, CMG-1165, Charlotte, N.C., 28288; (704) 383-5413

Total assets managed	$10,400,000,000
Total discretionary assets	$10,000,000,000
Total tax-exempt assets	$5,100,000,000
Total discretionary tax-exempt	$5,100,000,000
Equity indexed assets	$27,000,000
Mortgage-backed assets	$15,000,000
401(k)/457 plan assets	$782,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	32
Size of research staff	6

First Union National Bank is an active equity, balanced and short-term manager.

Its equity approach uses Graham & Dodd principles to identify low p/e stocks. It invests in companies that have average to above-average financial characteristics and sell substantially below market valuation levels. Its fixed-income approach is conservative and based on interest rate anticipation; it seeks to provide consistently positive returns, attractive levels of current income and capital gains when interest rates decline. Financial futures are used.

The asset mix Jan. 1 was 45% stocks, 37% bonds and 18% cash.

The bank follows 3,500 stocks closely and 300, generally; 75% of research is generated internally.

The parent is First Union Corp.

William R. Hackney III is chief investment officer; Jack (Jeb) S. Courtney is client contact.

First Wachovia

301 N. Main St., Winston-Salem, N.C. 27040; (919) 770-5764

Total assets managed	$11,803,000,000
Total discretionary	$10,435,000,000
Total tax-exempt assets	$7,426,000,000
Total discretionary tax-exempt	$6,058,000,000
Equity real estate assets	$340,000,000
Mortgage assets	$12,000,000
Equity indexed assets	$49,000,000
Mortgage-backed assets	$24,000,000
Tax-exempt clients	1,000
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	19
Size of research staff	9

First Wachovia is an active and passive equity, active fixed-income, balanced, real estate, short-term cash, timberland and GIC manager.

Its equity approach uncovers value by combining early identification of trends influencing stock prices and quantitative research and analysis. Its fixed-income approach is multidisciplined, weaving judgments about the interest rate environment with opportunities to add value though sector rotation, security swapping and credit analysis.

The asset mix Jan. 1 was 28.6% stocks, 41.9% bonds, 16.2% cash, 5.6% equity real estate, 0.2% mortgages, 0.4% mortgage-backed securities and 7.1% notes.

The firm follows 200 stocks closely and 900, generally; 30% of the research is generated internally.

H. Vernon Winters is chief investment officer; Thomas R. McAlister is client contact.

First Wisconsin Asset Management

777 E. Wisconsin Ave., Suite 1800, Milwaukee, Wis. 53202; (414) 765-6966

Total assets managed	$6,136,000,000
Total discretionary	$6,136,000,000
Total tax-exempt assets	$3,000,000,000
Total discretionary tax-exempt	$3,000,000,000
Equity indexed assets	$108,000,000
Fixed-income indexed assets	$1,000,000,000
Dedicated/immunized assets	$1,000,000,000
401(k)/457 assets managed	$200,000,000
Tax-exempt clients	1,350
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	18

First Wisconsin Asset Management is an active and passive equity, passive fixed-income, balanced and short-term manager.

Its active equity approach is concentrated in small- to medium-cap growth issues with superior financial characteristics and with a current market value price that does not adequately reflect the expected earnings growth.

The fixed-income approach adapts the basic principles of immunization and enhances portfolio returns relative to an appropriate benchmark. Enhanced bond index strategies are used.

The asset mix Jan. 1 was 30% stocks, 60% bonds and 10% cash.

The firm follows 100 stocks closely and 500, generally; 75% of the research is generated internally.

The parent is Firstar Corp.

Scott Harkness is chief investment officer; Michael Bills is client contact.

First Wisconsin Trust Co.

777 E. Wisconsin Ave., Milwaukee, Wis. 53202; (414) 765-4444

Total assets managed	$1,729,000,000
Total discretionary	$1,729,000,000
Total tax-exempt assets	$233,000,000
Total discretionary tax-exempt	$233,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	13

First Wisconsin Trust Co. is an active equity, balanced, short-term, real estate and passive international/global equity and fixed-income manager.

Its equity approach is conservative and income-oriented, emphasizing large-cap and some medium-cap issues. Current dividend yield and the prospect for dividend growth are important elements. Options are used.

Its real estate approach uses unleveraged equity positions in existing leased commercial properties to develop a stable income stream and potential appreciation.

The firm follows 150 stocks closely and 200, generally; 40% of the research is generated internally.

The parent is Firstar Corp.

Jackson Kirk is chief investment officer; Robert J. Aubrecht is client contact.

FirsTier Bank, Lincoln N.A.

P.O. Box 81008, Lincoln, Neb. 68501; (402) 434-1307

Total assets managed	$790,000,000
Total discretionary assets	$670,000,000
Total tax-exempt assets	$370,000,000
Total discretionary tax-exempt	$310,000,000

FirsTier Bank, Lincoln N.A. is an active equity, active-fixed income and balanced manager that also offers real estate and passive international equity management.

Its equity approach emphasizes growth stocks; valuation and asset allocation also are important. Its fixed-income approach uses interest rate anticipation, emphasizing high quality and liquidity.

Real estate assets are in closed-end funds managed by outside advisers.

The parent is FirsTier Financial Corp.

William S. Eastwood is chief investment officer; Norman Wilson is client contact.

Fischer Francis Trees & Watts Inc.

717 Fifth Ave., New York, N.Y. 10022; (212) 350-8000

Total assets managed	$14,900,000,000
Total discretionary	$14,900,000,000
Total tax-exempt assets	$13,400,000,000
Discretionary tax-exempt	$13,400,000,000
International fixed-income	$25,000,000
Dedicated/immunized assets	$100,000,000
Tax-exempt clients	45
Types of accounts managed	CEFGJ
No. of portfolio managers	15

Fischer Francis Trees & Watts Inc. is a domestic and global/international active bond and short-term manager.

It uses interest rate anticipation and sector analysis. It manages market risk and sector spread opportunities in prime quality issue with active trading. Hedged and unhedged foreign securities are used, as are options and fixed-income futures.

S. Bruce Kauffman and Cecilia Murphy Baron are client contacts.

Fisher Investments Inc.

301 Henrik Road, Woodside, Calif. 94062; (415) 851-3334

Total assets managed	$420,000,000
Total discretionary	$420,000,000
Total tax-exempt assets	$355,000,000
Total discretionary tax-exempt	$355,000,000
401(k)/457 assets managed	$15,000,000
Tax-exempt clients	63
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
Size of research staff	14

Fisher Investments Inc., an active equity manager, focuses on small-cap equities with low price-sales ratios, strong balance sheets and competitive business advantages as determined through quantitative/qualitative research.

The asset mix Jan. 1 was 77% stocks and 23% cash.

The firm follows 80 stocks closely and 120, generally; all research is generated internally.

Kenneth L. Fisher is chief investment officer; Joseph L. Toms is client contact.

Fleet/Norstar Investment Advisors Inc.

100 Westminster St., Providence, R.I. 02903; (401) 278-3318

Total assets managed	$12,500,000,000
Total discretionary	$12,500,000,000
Total tax-exempt assets	$6,000,000,000
Total discretionary tax-exempt	$6,000,000,000
401(k)/457 assets managed	$275,000,000
Tax-exempt clients	4,250
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	64
Size of research staff	6

Fleet/Norstar Investment Advisors Inc. is an active domestic and international equity, active fixed-income, balanced and short-term manager.

The firm's investment process begins with a systematic analysis of the economy, politics, world events and market conditions. Its equity approach focuses on larger, high-quality companies with above average and predictable earnings growth rates. Its fixed-income approach emphasizes high-quality standards while anticipating and responding to major changes in interest rates.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

The firm follows 200 stocks closely; 50% of research is generated internally.

The parent is Fleet/Norstar Financial Group.

Harold A. Mackinney Jr. is chief investment officer; Marshall Raucci Jr. is client contact.

25 largest mortgage managers

Firm	$ mils.*
Aetna Life	17,042
Prudential Asset	12,638
Principal Financial	10,932
CIGNA Investments	10,796
Travelers	9,758
John Hancock	6,668
Equitable Real Estate	5,204
Massachusetts Mutual	4,121
Aldrich, Eastman	3,410
Lincoln Nat'l	2,223
J.P. Morgan	2,163
Boylston Capital	2,070
State Mutual	1,655
New York Life	1,470
Latimer & Buck	1,113
Balcor	1,109
McMorgan	1,092
Manulife Financial	1,025
Washington Square	736
Equitable Agri-Business	667
Prudential Realty	446
Union Labor Life	442
GE Investments	400
Mitchell Hutchins	381
L.J. Melody	350
Total	**97,911**

*Discretionary tax-exempt assets

Flippin, Bruce & Porter Inc.

800 Main St., P.O. Box 6138, Lynchburg, Va. 24505; (804) 845-4900

Total assets managed	$318,000,000
Total discretionary	$318,000,000
Total tax-exempt assets	$252,000,000
Total discretionary tax-exempt	$252,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	3
Size of research staff	1

Flippin, Bruce & Porter Inc. is an active equity and balanced manager.

Its equity approach is contrarian. Managers look beyond current investor emotion, discounting Wall Street expectations and relating historical financial characteristics to current price.

Its fixed-income approach also is contrarian. Intermediate bonds are used to create a "barbell of quality" structure, producing a shorter average maturity with a higher-than-average yield.

The asset mix Jan. 1 was 79% equities, 15% bonds and 6% cash.

The firm follows 75 stocks closely and 150, generally; 50% of the research is generated internally.

John M. Flippin and John T. Bruce are chief investment officers; R.G. Porter is client contact.

Richard Fontaine Associates

111 S. Calvert Ave., Suite 1550, Baltimore, Md. 21202; (301) 385-1550

Total assets managed	$300,000,000
Total discretionary	$300,000,000
Total tax-exempt assets	$220,000,000
Total discretionary tax-exempt	$220,000,000
Tax-exempt clients	23
Types of accounts managed	CEF
Minimum separate account	$3,000,000
No. of portfolio managers	1
Size of research staff	1

Richard Fontaine Associates Inc., an active equity manager, takes an aggressive approach using a valuation-driven strategy to rotate within stock sectors and into cash or bonds for defensive purposes. Its fixed-income approach is based on interest rate anticipation and uses only short- to intermediate-term Treasuries.

The asset mix Jan. 1 was 38% equities, 29% bonds and 33% cash.

The firm follows 500 stocks generally; all research is generated internally.

Richard H. Fontaine is chief investment officer; Kathryn M. Barilla is client contact.

Forest Investment Associates

5605 Glenridge Drive, Suite 710, Atlanta, Ga. 30342; (404) 847-0794

Total assets managed	$71,000,000
Total discretionary	$47,000,000
Total tax-exempt assets	$47,000,000
Total discretionary tax-exempt	$47,000,000
Equity real estate assets	$47,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	2

Forest Investment Associates, a timberland manager, acquires and manages equity interests in timber and timberland in the United States with the objective of capital preservation and real appreciation. Properties are diversified by location and age of timber.

The asset mix Jan. 1 was 100% timberland.

Charles M. Tarver is chief investment officer; L. Richard Doelling is client contact.

Forstmann-Leff Associates

55 E. 52 St., 33rd Floor, New York, N.Y. 10055; (212) 407-9604

Total assets managed	$2,909,000,000
Total discretionary	$2,909,000,000
Total tax-exempt assets	$2,846,000,000
Total discretionary tax-exempt	$2,846,000,000
Tax-exempt clients	53
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	9

Forstmann-Leff Associates Inc. is an active equity, balanced, tactical asset allocation and short-term manager.

Its risk-averse, capital preservation- and asset allocation-driven equity approach uses sector rotation and market timing. Management of fixed-income and cash equivalents, both used as equity substitutes, is keyed to interest rate forecasting and positioning of the yield curve. Options and stock index futures are used.

The asset mix Jan. 1 was 76% stocks, 19% bonds and 5% cash.

The firm follows 160 stocks closely and 3,000, generally; 50% of the research is generated internally.

Joel B. Leff and William F. Harnisch are chief investment officers; Peter A. Lusk and Sarah J. Rife are client contacts.

Fox Asset Management

44 Sycamore Ave., Suite 3E, Little Silver, N.J. 07739; (201) 747-6345

Total assets managed	$326,000,000
Total discretionary	$326,000,000
Total tax-exempt assets	$245,000,000
Total discretionary tax-exempt	$245,000,000
International equity assets	$9,000,000
International fixed-income	$7,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	119
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	5
Size of research staff	1

Fox Asset Management is an active equity, active fixed-income and balanced manager.

It uses a bottom-up, value-oriented equity approach, focusing on cash flow to identify undervalued medium- to large-capitalization companies demonstrating consistent cash flow growth and sustainable above-average dividend yield and growth. Its fixed-income approach is non-anticipatory, concentrating on preserving capital and reducing the effects of interest rate volatility. It invests in intermediate maturities to reduce the risk of capital loss and to retain flexibility.

The asset mix Jan. 1 was 65% stocks, 23% bonds and 12% cash.

The firm follows 100 stocks closely and 2,000, generally; 60% of research is generated internally.

J. Peter Skirkanich is chief investment officer; W. Gavin Gilmor is client contact.

Foxhall Investment Management

815 Connecticut Ave., Suite 200, Washington, D.C. 20006; (202) 872-6611

Total assets managed	$346,000,000
Total discretionary	$325,000,000
Total tax-exempt assets	$161,000,000
Total discretionary tax-exempt	$161,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	240
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	8
Size of research staff	3

Foxhall Investment Management is an active equity, active bond, balanced, short-term and municipal bond fund manager.

The firm employs a top-down asset allocation process using the firm's analysis of forecasts; it uses a bottom-up approach to stock selection based on fundamentals and industry trends. For fixed-income, it uses an active duration strategy in a targeted approach.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

Fifty-five percent of the research is generated internally.

The parent is Thomson Advisory Group L.P.

John E. Montgomery is chief investment officer; James C. Van Story III is client contact.

Foyston, Gordon & Payne

10 King St. E., Suite 1201, Toronto, Ontario M5C 1C3; (416) 362-4725

Total assets managed	$400,000,000
Total discretionary	$400,000,000
Total tax-exempt	$320,000,000
Total discretionary tax-exempt	$320,000,000
For subsidiaries of U.S. firms	$100,000,000
Tax-exempt clients	15
U.S. subsidiaries	4
Types of accounts managed	CFU
Minimum separate account	$3,000,000
No. of portfolio managers	5

Foyston, Gordon & Payne Inc., a Canadian firm, is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach combines growth and low p/e stocks with Graham & Dodd analysis. Stock selection is primarily bottom-up, using an in-house screening process for fundamentals. Its fixed-income approach uses interest rate anticipation and sector analysis, concentrating on government securities augmented with high-quality corporate issues.

It follows 400 stocks closely; 80% of the research is generated internally.

Peter Gordon is chief investment officer and client contact.

Franklin Advisers Inc.

777 Mariners Island Blvd., San Mateo, Calif. 94404; (415) 378-8639

Total assets managed	$45,375,000,000
Total discretionary	$45,332,000,000
Total tax-exempt assets	$9,195,000,000
Total discretionary tax-exempt	$9,195,000,000
International fixed-income	$6,000,000
Mortgage-backed assets	$2,948,000,000
Types of accounts managed	CEFGU
Minimum separate account	$25,000,000
No. of portfolio managers	60
Size of research staff	25

Franklin Advisers Inc. is an active equity, active domestic and international fixed-income, real estate, short-term, and mortgage-backed securities manager.

In equities, it offers mutual funds using various approaches, including growth, emerging growth, value and quantitative. Several fixed-income mutual funds also are offered that utilize various strategies, including interest-rate anticipation, sector analysis and hedging to reduce volatility. Options and financial futures are used.

In real estate, the firm uses a long-term conservative investment approach.

The asset mix Jan. 1 was 10.4% stocks, 45.6% bonds, 11.9% cash, 0.4% equity real estate, 31.7% mortgage-backed securities.

The firm follows 300 stocks closely and 400, generally; 50% of the research is generated internally.

The parent is Franklin Resources Inc.

Rupert Johnson Jr., president, is chief investment officer; John Murray is client contact.

Franklin Asset Management Systems

999 Baker Way, Suite 410, San Mateo, Calif. 94404; (415) 570-3078

Total assets managed	$1,100,000,000
Total discretionary	$1,100,000,000
Total tax-exempt assets	$650,000,000
Total discretionary tax-exempt	$650,000,000
Tax-exempt clients	22
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	2

Franklin Asset Management Systems is an active equity manager offering South Africa-free portfolios. The firm uses growth and low p/e stocks.

The firm follows 500 stocks closely and 500, generally; all research is generated internally.

The parent is Franklin Resources Inc.

Marvin McClay is chief investment officer; J. Paul Lewis is client contact.

Franklin Portfolio Associates

1 Post Office Square, Boston, Mass. 02109 (617) 923-4448

Total assets managed	$3,900,000,000
Total discretionary	$3,600,000,000
Total tax-exempt assets	$3,600,000,000
Total discretionary tax-exempt	$3,400,000,000
401(k)/457 assets managed	$100,000,000
Tax-exempt clients	25
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	4

Franklin Portfolio Associates, an active domestic and international equity manager, is quantitative, using a multiple valuation approach to determine the relative attractiveness of a large universe of stocks. Portfolios are constructed to reflect client benchmarks. Stock index futures are used.

The asset mix Jan. 1 was 97% stocks and 3% cash.

The firm follows 3,500 stocks; all of the research is generated internally.

The parent is Mellon Bank.

John J. Nagorniak is chief investment officer; Spencer L. Timm is client contact.

Fraser Management Associates Inc.

309 S. Willard St., P.O. Box 494, Burlington, Vt. 05401; (802) 658-0322

Total assets managed	$80,000,000
Total discretionary	$80,000,000
Total tax-exempt assets	$22,000,000
Total discretionary tax-exempt	$22,000,000
Tax-exempt clients	102
Types of accounts managed	CEF
Minimum separate account	$100,000

Fraser Management Associates Inc. is an active domestic and international/global equity, passive fixed-income and balanced manager.

Its equity approach is contrarian; its fixed-income approach is passive.

James L. Fraser is chief investment officer; J. Traver Underwood is client contact.

In-house management: June 10.

Freedom Capital Management Corp.

1 Beacon St., Boston, Mass. 02108; (617) 725-2300

Total assets managed	$3,189,000,000
Total discretionary	$3,070,000,000
Total tax-exempt assets	$408,000,000
Total discretionary tax-exempt	$400,000,000
Mortgage-backed assets	$52,000,000
401(k)/457 assets managed	$29,000,000
Tax-exempt clients	25
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	7

Freedom Capital Management Corp. is an active equity, active fixed-income, short-term and balanced manager.

Its equity approach is thematic, focusing on growth stocks, while its proprietary model identifies undervalued companies. Its fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 38% stocks, 45% bonds, 4% cash and 13% mortgage-backed securities.

The firm follows 200 stocks closely and 400, generally; 50% of the research is generated internally.

The parent is John Hancock Insurance Co.

James Schmidt is chief investment officer; James Henderson is client contact.

Froley, Revy Investment Co.

10900 Wilshire Blvd., Suite 1050, Los Angeles, Calif. 90024; (213) 208-4938

Total assets managed	$687,000,000
Total discretionary	$687,000,000
Total tax-exempt assets	$480,000,000
Total discretionary tax-exempt	$480,000,000
Tax-exempt clients	22
Types of accounts managed	CFG
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	3

Froley, Revy Investment Co. Inc. invests in growth and small-cap companies through convertible securities.

The asset mix Jan. 1 was 10% stocks, 76% convertible securities and 14% cash.

The firm follows 300 stocks closely and 800, generally; 60% of the research is generated internally.

George A. Froley and Thomas Revy are the chief investment officer; Melinda J. Gordon is client contact.

Frontier Capital Management

99 Summer St., Boston, Mass. 02110; (617) 261-0777

Total assets managed	$943,000,000
Total discretionary	$943,000,000
Total tax-exempt assets	$875,000,000
Total discretionary tax-exempt	$875,000,000
Tax-exempt clients	36
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	5

Frontier Capital Management Co. is an active equity and balanced manager.

Its equity approach focuses on companies with rapidly growing earnings. That approach is used in traditional growth and small-cap portfolios.

The asset mix Jan. 1 was 98% stocks and 2% cash.

The firm follows 250 stocks closely and 2,000, generally; 50% of the research is generated internally.

J. David Wimberly is chief investment officer; Nancy J. Smith is client contact.

Furgueson Capital Management Inc.

19 W. 44th St., New York, N.Y. 10036; (212) 840-1781

Total assets managed	$114,000,000
Total discretionary	$82,000,000
Total tax-exempt assets	$21,000,000
Total discretionary tax-exempt	$21,000,000
Tax-exempt clients	27
Types of accounts managed	CEF
Minimum separate account	$100,000
No. of portfolio managers	4

Furgueson Capital Management Inc. is an active equity, fixed-income, balanced and short-term manager.

Its equity approach emphasizes growth and emerging growth stocks analyzed through Graham & Dodd principles. Its fixed-income approach is passive. Bonds are used for income and balance. Maturities usually are tendered to reduce interest rate risk.

The asset mix Jan. 1 was 72.3% stocks, 16.5% bonds and 11.2% cash.

The firm follows 50 stocks closely and 100, generally; 20% of the research is generated internally.

Cornelius Furgueson IV is chief investment officer; Mr. Furgueson and Stephen H. Orr are client contacts.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

G

Gabelli-O'Connor Fixed Income Management Co.

8 Sound Shore Drive, Greenwich, Conn. 06830; (203) 629-2090

Total assets managed	$729,000,000
Total discretionary	$657,000,000
Total tax-exempt assets	$223,000,000
Total discretionary tax-exempt	$151,000,000
Tax-exempt clients	3
Types of accounts managed	CJ
Minimum separate account	$20,000,000
No. of portfolio managers	3

Gabelli-O'Connor Fixed Income Management Co. is an active fixed-income and short-term manager.

Its fixed-income approach employs yield curve and intermarket spread analysis. Emphasis is placed on U.S. Treasuries where narrow bid/asked spreads permit managers to actively trade on market volatility. Portfolios have up to a maximum maturity of five years.

The asset mix Jan. 1 was 10% bonds and 90% cash.

The firm is an affiliate of The Gabelli Group.

Thomas E. O'Connor is managing partner; Norma J. Nisnoff is client contact.

Galleon Capital Management

1527 Calle Tulipanes, San Diego, Calif. 92024; (619) 943-1620

Total assets managed	$21,000,000
Total discretionary	$18,000,000
Total tax-exempt assets	$8,000,000
Total discretionary tax-exempt	$8,000,000

T. Rowe Price
Guaranteed Asset Advisers, Inc.

Specialists in Managing
Guaranteed Investment Contracts

Contact: Keith Lewis (301) 547-2332

T. Rowe Price
100 E. Pratt Street, Baltimore, MD 21202

T.RowePrice

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In today's volatile financial environment, it has become very fashionable to talk about "quality".

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THE CONFEDERATION LIFE GROUP OF COMPANIES
ATLANTA - TORONTO - LONDON

Mortgage-backed assets	$1,000,000
Tax-exempt clients	3
Types of accounts managed	F
Minimum separate account	$1,000,000
No. of portfolio managers	2

Galleon Capital Management is an active equity, active fixed-income, balanced, mortgage-backed securities and short-term manager.

Its equity approach is uses Graham & Dodd analysis to identify cash- and asset-rich companies that have a demonstrated ability to consistently earn above-average return on equity and are selling at moderate p/e ratios.

Its fixed-income approach uses interest-rate anticipation, sector analysis and quantitative techniques. It uses strict control of duration, yield, income and cash flow; value is added using quantitative methods to identify sector/quality spread valuation, issue selection and swapping analysis.

The firm follows 250 stocks closely and 1,800, generally; 70% of the research is generated internally.

Louis Acevedo is chief investment officer and client contact.

GAMCO Investors Inc.

655 Third Ave., New York, N.Y. 10017; (212) 972-2350

Total assets managed	$3,896,000,000
Total discretionary	$3,896,000,000
Total tax-exempt assets	$3,008,000,000
Total discretionary tax-exempt	$3,008,000,000
Tax-exempt clients	313
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	19
Size of research staff	8

GAMCO Investors Inc., an active equity manager, uses Graham & Dodd analysis. Its approach hinges on identifying asset-rich companies that are selling at a discount to their private market value, and where a catalyst has emerged to display these values.

The asset mix Jan. 1 was 86.5% stocks and 13.5% cash.

The firm follows 350 stocks closely and 650, generally; all research is generated internally.

The parent is Gabelli Funds Inc.

Mario J. Gabelli is chief investment officer; Douglas R. Jamieson is client contact.

Gardner and Preston Moss

1 Winthrop Square, Boston, Mass. 02110; (617) 482-6500

Total assets managed	$2,248,000,000
Total discretionary	$2,248,000,000
Total tax-exempt assets	$1,733,000,000
Total discretionary tax-exempt	$1,733,000,000
International fixed-income	$201,000,000
Mortgage-backed assets	$63,000,000
Tax-exempt clients	143
Types of accounts managed	CEFGJ
Minimum separate account	$600,000
No. of portfolio managers	17
Size of research staff	3

Gardner and Preston Moss Inc. is an active equity, active fixed-income and balanced manager.

The firm evaluates economic valuation and technical factors to determine equity commitments. Sector allocation is determined by analysis of key variables, and stock selection is based on a combination of fundamentals and valuation.

Its fixed-income approach stresses interest rate anticipation and sector analysis. The firm actively alters maturities and sector exposure based on a disciplined analysis of both valuation and fundamental trends.

The asset mix Jan. 1 was 30% stocks, 44% bonds, 14% cash, 3% mortgage-backed securities and 9% international fixed income.

Robert C. Shanley and William M. McCarthy are chief investment officers.

Garrett Realty Advisors

1122 Two Turtle Creek Village, Dallas, Texas 75219; (214) 520-7777

Total assets managed	$272,000,000
Total discretionary	$272,000,000
Total tax-exempt assets	$272,000,000
Total discretionary tax-exempt	$272,000,000
Equity real estate assets	$232,000,000
Mortgage assets	$40,000,000
Tax-exempt clients	6
Types of accounts managed	CJ
Minimum separate account	$5,000,000
No. of portfolio managers	6

Garrett Realty Advisors, a real estate manager, provides a narrowly defined range of real estate services, specializing in institutional-grade properties. It has expertise in handling troubled portfolios with a hands-on, proactive internal management team.

The asset mix Jan. 1 was 85% equity real estate and 15% mortgages.

The parent is Garrett Advisory Corp.

Dan Lawson is chief investment officer; Joe Garrett is client contact.

Gateway Investment Advisers Inc.

400 Technecenter Drive, Milford, Ohio 45150; (513) 248-2700

Total assets managed	$347,000,000
Total discretionary	$347,000,000
Total tax-exempt assets	$125,000,000
Total discretionary tax-exempt	$125,000,000
Tax-exempt clients	31
Types of accounts managed	CFG
Minimum separate account	$3,000,000
No. of portfolio managers	3

Gateway Investment Advisers Inc. is an active equity and balanced manager.

Its hedged indexing strategy uses a computer program to evaluate the appropriate index option strike price and expiration date.

Walter G. Sall is chief investment officer; J. Patrick Rogers is client contact.

GE Investments

3003 Summer St., Stamford, Conn. 06905; (203) 326-2300

Total assets managed	$33,201,000,000
Total discretionary	$33,201,000,000
Total tax-exempt assets	$27,085,000,000
Discretionary tax-exempt	$27,085,000,000
Equity real estate assets	$1,825,000,000
Mortgage assets	$400,000,000
International equity assets	$1,600,000,000
International fixed-income	$50,000,000
International cash assets	$15,000,000
Equity indexed assets	$3,882,000,000
Dedicated/immunized assets	$2,500,000,000
401(k)/457 assets managed	$5,008,000,000
Tax-exempt clients	22
Types of accounts managed	CFG
Minimum separate account	$10,000,000
No. of portfolio managers	25
Size of research staff	20

GE Investments is an active and passive equity, active fixed-income, active international/global equity and fixed-income, balanced, real estate, short-term and private placements manager.

Its equity approach stresses stock selection based on growth and quality together with sector concentration. International equities are actively managed using a top-down/bottom-up management style. The systematic portfolios consist of quantitative models in both value and growth strategies. In private placements, it makes selective direct investments in firms requiring growth capital.

Fixed-income portfolios are actively managed using a relative value approach to domestic vs. international bond diversification.

In real estate, it makes direct investments in high-quality, well-located assets in major metropolitan areas.

Options and financial futures are used.

The asset mix Jan. 1 was 38% stocks, 42% bonds, 5% cash, 7% equity real estate, 1% mortgages and 7% private placements and venture capital.

The firm follows 400 stocks closely and 800, generally; 50% of research is generated internally.

The parent is General Electric Co.

Dale F. Frey is chief investment officer; G.R. Norman is client contact.

Geewax, Terker & Co.

99 Starr St., Phoenixville, Pa. 19460; (215) 935-3000

Total assets managed	$2,500,000,000
Total discretionary	$2,500,000,000
Total tax-exempt assets	$2,500,000,000
Total discretionary tax-exempt	$2,500,000,000
Tax-exempt clients	34
Types of accounts managed	CEFG
Minimum separate account	$50,000,000
No. of portfolio managers	3
Size of research staff	2

Geewax, Terker & Co., an active equity manager, blends quantitative valuation analysis with sector rotation among growth/value stocks.

The firm follows 3,000 stocks closely; 80% of the research is generated internally.

John J. Geewax is chief investment officer and client contact.

General American Investors

330 Madison Ave., New York, N.Y. 10017; (212) 916-8408

Total assets managed	$900,000,000
Total discretionary	$518,000,000
Total tax-exempt assets	$518,000,000
Total discretionary tax-exempt	$518,000,000
Tax-exempt clients	8
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No.of portfolio managers	3
Size of research staff	5

General American Investors, an active equity manager, has a fundamental analysis orientation and emphasizes growth stocks. It uses bottom-up selection and a three-year time frame with stocks having a 50% appreciation potential and minimum downside risk if potential isn't realized.

The asset mix Jan. 1 was 90.6% stock and 9.4% cash.

The firm follows 100 stocks closely and 1000, generally; 95% of research is generated internally.

William J. Gedale is chief investment officer; Jim Book is client contact.

General American Life Insurance Co.

700 Market St., St. Louis, Mo. 63101; (314) 231-1700

Total assets managed	$6,100,000,000
Total discretionary assets	$5,362,000,000
Total tax-exempt assets	$1,951,000,000
Total discretionary tax-exempt	$1,328,000,000
GICs	$642,000,000
Annuities	$70,000,000
Mortgage assets	$233,000,000
Equity indexed assets	$61,000,000
Fixed-income indexed assets	$44,000,000
401(k)/457 assets managed	$30,000,000
Tax-exempt clients	758
Types of accounts managed	CGJ
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	4

General American Life Insurance Co. is an active and passive equity, active fixed-income, balanced, short-term and commercial mortgage manager.

The insurer offers three pooled equity accounts: an S&P 500 index fund; an NYSE low-cap fund; and an actively managed growth fund that uses Morgan Stanley Asset Management as investment adviser.

In fixed income, it offers three accounts with divergent strategies: a publicly traded bond fund; a long-term bond fund; and a private placement bond fund. It also offers a commercial mortgage loan fund as a fixed-income alternative.

Options and financial futures are used.

The separate account asset mix Jan. 1 was 30% stocks, 11% bonds, 22% cash and 37% mortgages.

Leonard M. Rubenstein is chief investment officer for securities and Donald L. Smith is chief investment officer for real estate; Ronald O. Drury is client contact.

Geneva Capital Management

250 E. Wisconsin Ave., Milwaukee, Wis. 53202; (414) 224-6002

Total assets managed	$53,000,000
Total discretionary	$53,000,000
Total tax-exempt assets	$49,000,000
Total discretionary tax-exempt	$49,000,000
Mortgage-backed assets	$2,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	55
Types of accounts managed	C
Minimum separate account	$500,000
No. of portfolio managers	2

Geneva Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on growth stocks; emphasis is on companies with healthy balance sheets, market leadership positions, earnings dynamics, low-cost production and minimum annual sales of $100 million. Its fixed-income approach targets bonds with maximum maturity of 10 years and minimum A rating; maturities are laddered.

The asset mix Jan. 1 was 40% stocks, 55% bonds and 5% mortgage-backed securities.

The firm follows 70 stocks closely and 100, generally; 50% of the research is generated internally.

William A. Priebe is chief investment officer; Amy S. Croen is client contact.

GeoCapital Corp.

655 Madison Ave., New York, N.Y. 10021; (212) 935-0111

Total assets managed	$1,021,000,000
Total discretionary	$1,021,000,000
Total tax-exempt assets	$932,000,000
Total discretionary tax-exempt	$932,000,000
Tax-exempt clients	28
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	3

GeoCapital Corp. is an active equity manager. The firm invests primarily in small-capitalization equities, normally using both growth/technology and special situation investments. This allows for high growth coupled with a defensive posture.

The asset mix Jan. 1 was 94% stocks and 6% cash.

The firm follows 70 stocks closely and 50, generally; 90% of the research is generated internally.

Irwin Lieber is chief investment officer and client contact.

Geometry Asset Management Co. Inc.

1251 Avenue of the Americas, Suite 1100, New York, N.Y. 10020; (212) 391-1111

Total assets managed	$100,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$80,000,000
Total discretionary tax-exempt	$80,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Geometry Asset Management Co. Inc. is an active domestic equity, active international/global equity and fixed-income, and short-term manager.

It is a value/small-cap quantitative equity investor that uses a multifactor valuation model. In fixed income, global portfolios are tailored to meet client needs and objectives while incorporating their tolerance for risk. It uses options and stock index futures.

The asset mix Jan. 1 was 100% stocks.

The firm follows 100 stocks closely and 350, generally; 80% of research is generated internally.

James W. Lewis is chief investment officer; Cynthia L. Whitney is client contact.

GeoVest Advisors Inc.

1451 Pittsford-Victor Road, Fairport, N.Y. 14450; (716) 248-5050

Total assets managed	$56,000,000
Total discretionary	$56,000,000
Total tax-exempt assets	$12,000,000
Total discretionary tax-exempt	$12,000,000
International equity assets	$500,000
International fixed-income	$1,000,000
Mortgage-backed assets	$480,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	20
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	5
Size of research staff	2

GeoVest Advisors Inc. is an active domestic and international/global equity, active and passive domestic bond, passive international/global bond, balanced and short-term manager.

25 largest managers of dedicated/immunized assets

Firm	$ mils.*
Prudential Fixed Income	7,042
J.P. Morgan	6,756
CIGNA Investments	5,201
Bankers Trust	4,516
Jennison Associates	3,536
Pacific Mutual	3,182
Metropolitan Life	2,935
GE Investments	2,500
Bank of New York	2,000
Mellon Bond	1,783
State Street Research	1,602
Lincoln Capital	1,272
Chase Investors	1,218
Washington Square	1,191
Mitchell Hutchins	1,090
Putnam	1,060
First Wisconsin Asset	1,000
Aon Advisors	970
Mississippi Valley	950
State Street Bank	853
Boylston Capital	775
Wright Investors	729
McGlinn Capital	638
Dewey Square	600
BEA Associates	550
Total	**54,548**

*Discretionary tax-exempt assets

Its equity approach screens stocks relative to historical p/e multiple for industry group selection. From there, fundamental analysis is used.

Its fixed-income approach develops the expected yield curve based on economic scenarios. Then, quality spread analysis is applied. It uses options and financial futures.

The asset mix Jan. 1 was 58% stocks, 23% bonds, 15% cash and 4% mortgage-backed securities.

The firm follows 40 stocks closely and 300, generally.

Robert E. Reeves is chief investment officer; Priscilla Baker Jones and David Upson are client contacts.

GIM Global Advisors Inc.

751 Broad St., Newark, N.J. 07101; (201) 802-7805

Total assets managed	$54,000,000
Total discretionary	$54,000,000
Total tax-exempt assets	$54,000,000
Total discretionary tax-exempt	$54,000,000
International equity assets	$54,000,000
Tax-exempt clients	3
Types of accounts managed	C
Minimum separate account	$10,000,000

GIM Global Advisors Inc. is an active international equity manager with a top-down macroeconomic-based approach. Country selection and sector rotation emphasize markets and companies with accelerating earnings growth. Particular attention is given to research on European markets.

In addition, the firm provides exposure to international real estate by investing in the equities of non-U.S. property companies.

The asset mix Jan. 1 was 76% stocks and 24% international real estate securities.

The firm follows 500 stocks closely and 1,500, generally; 60% of research is generated internally.

The parent is G.I.M. (B.V. Algemeen Vermogensbeheer).

Peter Zwart is chief investment officer; Joseph D. Reed is client contact.

Gintel Equity Management

Greenwich Office Park, Suite 6, Greenwich, Conn. 06831; (203) 622-6400

Total assets managed	$187,000,000
Total discretionary	$187,000,000
Total tax-exempt assets	$79,000,000
Total discretionary tax-exempt	$79,000,000
Tax-exempt clients	25
Types of accounts managed	CEFJ
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	4

Gintel Equity Management, an active equity and balanced manager, takes a value-oriented approach using low p/e and Graham & Dodd analysis. The firm looks for emerging growth stocks and is willing to concentrate in 25 stocks or less.

The asset mix Jan. 1 was 36% stocks and 64% cash.

The firm follows 30 stocks closely and 100, generally; 90% of the research is generated internally.

The parent is Gintel & Co.

Robert Gintel is chief investment officer; A.L. Robinson is client contact.

The Glenmede Trust Co.

229 S. 18th St., Philadelphia, Pa. 19103; (215) 875-3200

Total assets managed	$6,100,000,000
Total discretionary	$5,800,000,000
Total tax-exempt assets	$4,500,000,000
Total discretionary tax-exempt	$4,500,000,000
International equity assets	$120,000,000
Mortgage-backed assets	$1,800,000,000
Tax-exempt clients	43
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	2

The Glenmede Trust Co. is an active equity, active fixed-income, balanced, active international/global equity and short-term manager.

Its value-oriented equity approach is enhanced by earnings expectation and price momentum.

Its fixed-income approach uses governments, agencies and mortgage-backed securities, buying high-quality issues to eliminate credit risk and using sector swaps to find value.

The asset mix Jan. 1 was 40% stocks, 15% bonds, 5% cash and 40% mortgage-backed securities.

The firm follows 225 stocks closely and 1,000, generally; 40% of research is generated internally.

The parent is The Glenmede Corp.

John Church is chief investment officer; Charles E. Bradford is client contact.

Glickenhaus & Co.

6 E. 43rd. St., New York, N.Y. 10017; (212) 953-7800

Total assets managed	$1,400,000,000
Total discretionary	$1,400,000,000
Total tax-exempt assets	$960,000,000
Total discretionary tax-exempt	$960,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	77
Types of accounts managed	CEFJ
Minimum separate account	$4,000,000
No. of portfolio managers	16
Size of research staff	2

Glickenhaus & Co. is an active equity, active-fixed income and balanced manager.

Its equity approach is risk conscious and price sensitive. Fundamental analysis and extensive accounting validation are used to evaluate downside risk vs. profit potential. Stock characteristics include low p/e, high yield, low price-to-book, high EPS growth and excess cash flow.

Its fixed-income approach also is risk conscious, analyzing individual issues and sectors to determine which securities are mispriced relative to the market using in-depth credit research and security pricing data.

The asset mix Jan. 1 was 70% stocks 20% bonds and 10% cash.

The firm follows 100 stocks closely and 300, generally; 80% of research is generated internally.

Seth M. Glickenhaus is chief investment officer; Connie Mosk Mazur is client contact.

Global Asset Management

135 E. 57th St., New York, N.Y. 10022; (212) 888-4200

Total assets managed	$1,800,000,000
Total discretionary	$1,800,000,000
Total tax-exempt assets	$83,000,000
Total discretionary tax-exempt	$83,000,000
International equity assets	$75,000,000
International fixed-income	$2,000,000
International cash assets	$6,000,000
Tax-exempt clients	3
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	18

Global Asset Management is an active equity, active international/global equity and fixed-income, and short-term manager.

Its equity approach is to seek long-term, fundamental value, and is frequently contrarian. Options and financial futures are used.

In addition to the assets above, $12 million in discretionary, tax-exempt assets are passed to external managers for management.

The parent is Global Asset Management Ltd.

Gilbert de Botton is chief investment officer; Edward E. Madden is client contact.

Global Fixed Income Advisors

751 Broad St., 2 Plaza, Newark, N.J. 07102; (201) 802-8062

Total assets managed	$4,346,000,000
Total discretionary	$4,346,000,000
Total tax-exempt assets	$1,710,000,000
Total discretionary tax-exempt	$1,710,000,000
International fixed-income	$1,710,000,000
Tax-exempt clients	27
Types of accounts managed	CE
Minimum separate account	$20,000,000
No. of portfolio managers	5
Size of research staff	3

Global Fixed Income Advisors is an active international/global fixed-income and short-term manager.

Its fixed-income approach emphasizes fundamental analysis of currencies and bond markets, but uses technical analysis to take advantage of short-term opportunities as they arise in the marketplace. Portfolios emphasize high-quality, highly liquid and mainly government or international agency issues. Performance is achieved through active management of currencies and maturities, not by trading down in quality. Options are used occasionally.

The asset mix Jan. 1 was 100% bonds.

The parent is Prudential Insurance Co. of America.

Kenneth A. Windheim is chief investment officer; Ann E. Kale is client contact.

Globe Finlay Inc.

200 Park Ave., New York, N.Y. 10166; (212) 557-7022

Total assets managed	$1,904,000,000
Total discretionary	$1,904,000,000
Total tax-exempt assets	$1,182,000,000

Total discretionary tax-exempt $1,182,000,000
International equity assets $876,000,000
International fixed-income $3,000,000
International cash assets $201,000,000
Tax-exempt clients 34
Types of accounts managed ..... CEFG
Minimum separate account $20,000,000
No. of portfolio managers 9
Size of research staff 2

Globe Finlay Inc. is an active international/global equity and balanced manager.

The firm is an active allocator with a stock-selection discipline based on identifying companies with sustainable earnings growth rates priced at a discount to local market valuation criteria.

The asset mix Jan. 1 was 95.4% stocks, 0.1% bonds and 4.5% cash.

The firm follows 250 stocks closely and 900, generally; 75% of research is generated internally.

The parent is Globe International Ltd.

Francis Finlay is chief investment officer; Ruth Shiadovsky is client contact.

GMO Woolley Ltd.

Winchester House, 77 London Wall, London Wall, London ECN 1BE U.K.; 71-588-7753

See entry for GRANTHAM, MAYO, VAN OTTERLOO & CO.

Golder, Thoma & Cressey

120 S. LaSalle St., Chicago, Ill. 60603; (312) 853-3322

Total assets managed $395,000,000
Total discretionary $395,000,000
Total tax-exempt assets $257,000,000
Total discretionary tax-exempt . $257,000,000
Types of accounts managed ..... CEFGJ
Minimum separate account $2,000,000
No. of portfolio managers 7
Size of research staff 8

Golder, Thoma & Cressey is an active equity manager that invests in private companies in consolidating, fragmented industries by teaming with industry management to build companies through acquisition and internal growth.

The asset mix Jan. 1 was 96% stocks and 4% cash.

Half of the research is generated internally.

Stanley C. Golder is chief investment officer; Carl D. Thoma is client contact.

Goldman Sachs Asset Management

32 Old Slip, 34th Floor, New York, N.Y. 10005; (212) 902-0800

Total assets managed $22,826,000,000
Total discretionary $19,142,000,000
Total tax-exempt assets $3,890,000,000
Total discretionary tax-exempt $3,890,000,000
International fixed-income $26,000,000
Dedicated/immunized assets .. $422,000,000
Mortgage-backed assets $258,000,000
Tax-exempt clients 178
Types of accounts managed ..... CEFGJ
No. of portfolio managers 20
Size of research staff 3

Goldman Sachs Asset Management is an active and passive domestic equity, active domestic and international/global fixed-income, balanced and short-term manager.

Its active equity approach is value-oriented, combining company and macroanalysis; its quantitative equity approach relies on proprietary, computer-directed, non-discretionary systems.

Its fixed-income approach seeks to enhance customized portfolios through the application of advanced quantitative techniques to portfolio structure, sector allocation and security selection.

Options and financial futures are used.

The firm runs global bond and currency management overlay strategies on $26 million managed internally.

The asset mix Jan. 1 was 27% stocks, 22% bonds, 41% cash, 7% mortgage-backed securities and 3% asset-backed securities.

The parent is Goldman, Sachs & Co.

Lee Cooperman, Fischer Black and Alan Shuch are chief investment officers; David K. Kaugher and Larry A. Kohn are client contacts.

J.C. Goodgal Inc.

600 Park Ave., Paterson, N.J. 07504; (201) 278-2327

Total assets managed $6,000,000
Total discretionary $6,000,000
Total tax-exempt assets $4,000,000
Total discretionary tax-exempt ... $4,000,000
Tax-exempt clients 11
Types of accounts managed ..... CF
Minimum separate account $100,000
No. of portfolio managers 1

J.C. Goodgal Inc. is an active equity, active and passive fixed-income, balanced and short-term manager.

For equities, it follows a value-oriented approach focusing on low p/e, low price/cash flow and price/private market value ratios. Return on equity in excess of 12% and low debt/capital are also important. The fixed-income approach is passive, focusing on structured maturities.

The asset mix Jan. 1 was 51% equities, 37% fixed income and 12% cash.

The firm follows 20 stocks closely and 50, generally; 80% of the research is generated internally.

Jay Charles Goodgal is chief investment officer and client contact.

Gradison Investment Advisors

580 Walnut St., Cincinnati, Ohio 45202; (513) 579-5866

Total assets managed $318,000,000
Total discretionary $305,000,000
Total tax-exempt assets $179,000,000
Total discretionary tax-exempt . $167,000,000
Tax-exempt clients 102
Types of accounts managed ..... CEFGJ
Minimum separate account $500,000
No. of portfolio managers 6

Gradison Investment Advisors is an active and passive equity, active and passive fixed-income and balanced manager.

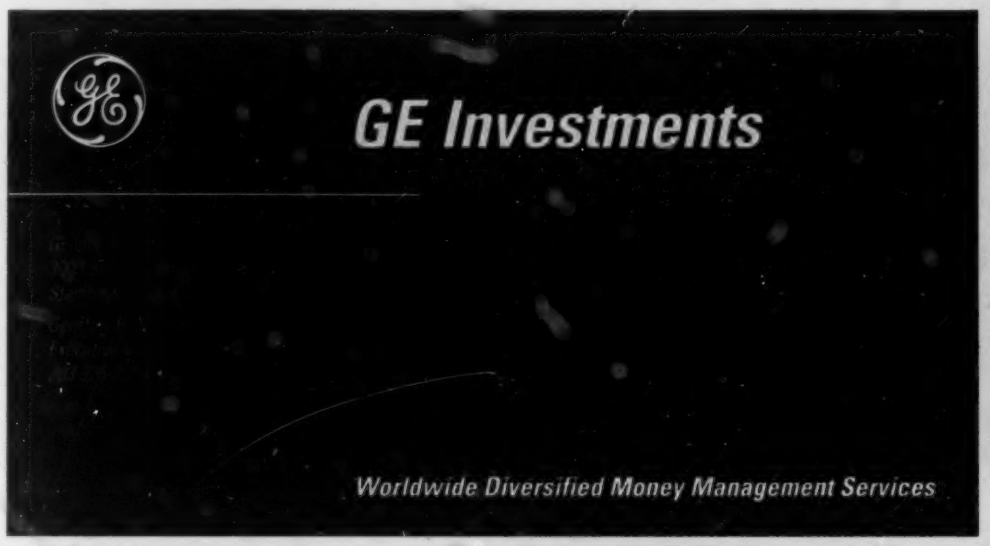
Its equity approach is growth and value oriented, using quantitative techniques. The approach is earnings-driven and disciplined. Its fixed-income approach uses government and agency securities in staggered maturities.

The asset mix Jan. 1 was 50% stocks, 45% bonds and 5% cash.

The parent is Gradison & Co.

William J. Leugers Jr. is chief investment officer; Alfred M. Brunner is client contact.

Real estate directory: Sept. 16.



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Ohio 216-737-8450 · Cincinnati · Columbus · Cleveland

Granahan Investment Management Inc.
303 Wyman St., Waltham, Mass. 02154; (617) 890-4412

Total assets managed	$80,000,000
Total discretionary	$80,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
Tax-exempt clients	1
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	3

Granahan Investment Management Inc., an active equity manager, emphasizes investments in small companies.

The asset mix Jan. 1 was 92% stocks and 8% cash.

John J. Granahan is chief investment officer; Jane M. White is client contact.

Grantham, Mayo, Van Otterloo & Co.
40 Rowes Wharf, Boston, Mass. 02110; (617) 330-7500

Total assets managed	$7,281,000,900
Total discretionary	$7,281,000,000
Total tax-exempt ass.	$6,285,000,000
Total discretionary tax exempt	$6,285,900,000
International equity assets	$2,436,000,000
Tax-exempt clients	121
Types of accounts managed	CEF

Grantham, Mayo, Van Otterloo & Co. manages domestic, international and global equity portfolios for institutional investors.

Its domestic equity offerings include value-oriented active management and several multifactor quantitative products (core, growth, value allocation and South Africa-free core).

Its international equity offerings include value-oriented active management (EAFE, regional and Japan-only variants) and a multifactor quantitative core approach.

Susan Randall is client contact.

The assets of GMO Woolley Ltd., a wholly owned, London-based subsidiary of GMO, are included in the totals above. GMO Woolley manages $611 million in assets for U.K. institutions, using quantitative methods to manage both equity and balanced portfolios. Paul Woolley is chief investment officer and client contact at (71) 588-7758.

R.W. Graybill Ltd.
568 Spring Road, Elmhurst, Ill. 60126; (708) 941-9460

Total assets managed	$60,000,000
Total discretionary	$60,000,000
Total tax-exempt assets	$41,000,000
Total discretionary tax-exempt	$41,000,000
Tax-exempt clients	42
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	2

R.W. Graybill Ltd., a balanced manager, uses fundamental analysis, quantitative measures of valuation, bottom-up selection and growth and emerging growth stocks in its equity approach. The passive fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 47% stocks, 39% bonds and 14% cash.

The firm follows 40 stocks closely and 120, generally; 20% of the research is generated internally.

R.W. Graybill is chief investment officer; Ronn R. Bagge is client contact.

Great-West Life Assurance
8505 E. Orchard Road, Englewood, Colo. 80111; (303) 889-3000

Total assets managed	$18,043,000,000
Total discretionary assets	$16,748,000,000
Total tax-exempt assets	$7,547,000,000
Total discretionary tax-exempt	$7,547,000,000
GICs	$1,824,000,000
Annuities	$368,000,000
401(k)/457 assets managed	$1,540,000,000
Tax-exempt clients	5,518
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	360

Great-West Life Assurance Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach focuses on growth stocks. Its fixed-income approach is based on interest rate anticipation and sector and yield curve analysis. Privately placed bonds and commercial mortgages are core holdings, supplemented by an aggressively traded public bond portfolio. Options and fixed-income futures are used.

The separate account asset mix Jan. 1 was 61% stocks, 16% fixed income, 10% cash, 11% mortgage-backed securities and 2% other.

The insurer follows 50 stocks closely and 200, generally; 50% of research is generated internally.

The parent is Power Corp. of Canada.

J.T. Hughes is chief investment officer; Al Cunningham is client contact.

David J. Greene and Co.
30 Wall St., New York, N.Y. 10005; (212) 344-5180

Total assets managed	$1,148,000,000
Total discretionary	$1,126,000,000
Total tax-exempt assets	$862,000,000
Total discretionary tax-exempt	$856,000,000
Tax-exempt clients	93
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	9

David J. Greene and Co., an active equity manager, invests in undervalued stocks at prices that don't reflect earnings power, cash flow and asset value, with particular emphasis on special situations.

The asset mix Jan. 1 was 70% stocks and 30% cash.

The firm follows 100 stocks closely and 300, generally; 95% of the research is generated internally.

Alan I. Greene is chief investment officer; Erwin A. Zeuschner is client contact.

Greenleaf Capital Management
803 Tower East, Shaker Heights, Ohio 44122; (216) 752-8900

Total assets managed	$250,000,000
Total discretionary	$245,000,000
Total tax-exempt assets	$192,000,000
Total discretionary tax-exempt	$192,000,000
International equity assets	$5,000,000
International fixed-income	$2,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	71
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Greenleaf Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes growth and low p/e stocks, selecting those whose cash flow return on investment is improving and which also represent good value.

Its fixed-income approach uses high-quality intermediate maturity bonds with some interest rate anticipation.

The asset mix Jan. 1 was 40% stocks, 45% bonds and 15% cash.

The firm follows 50 stocks closely and 90, generally; 50% of the research is generated internally.

Geofrey J. Greenleaf is chief investment officer; Gene L. Triponey is client contact.

Greenwich Asset Management Inc.
600 Steamboat Road, Greenwich, Conn. 06830; (203) 622-5600

Total assets managed	$136,000,000
Total discretionary	$136,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
Tax-exempt clients	4
Types of accounts managed	CE
Minimum separate account	$2,000,000
No. of portfolio managers	2

Greenwich Asset Management Inc. is an active bond, short-term and fixed-income derivatives manager.

Its fixed-income approach emphasizes relative value, reviewing the yield curve configuration, Treasury spreads and option-implied volatility using data and analytics generated by proprietary investment software. Fixed-income options and futures are used.

The asset mix Jan. 1 was 98% bonds and 2% options on Treasury bond futures.

The parent is Greenwich Capital Markets.

Peter M. Lebovitz is chief investment officer; William K. Daley is client contact.

Greenwood Capital Associates Inc.
P.O. Box 3181, Greenwood, S.C. 29648; (803) 229-2571

Total assets managed	$310,000,000
Total discretionary	$310,000,000
Total tax-exempt assets	$210,000,000
Total discretionary tax-exempt	$210,000,000
International equity assets	$5,000,000
Mortgage-backed assets	$21,000,000
401(k)/457 assets managed	$75,000,000
Tax-exempt clients	52
Types of accounts managed	CFG
Minimum separate account	$250,000
No. of portfolio managers	3

Greenwood Capital Associates Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value oriented, using growth and low p/e stocks, sector rotation, Graham & Dodd analysis and market timing/tactical asset allocation. Its fixed-income approach is conservative driven by interest rate anticipation and sector analysis. Covered calls are used.

The asset mix Jan. 1 was 40% stocks, 40% bonds, 10% cash and 10% mortgage-backed securities.

The firm follows 60 stocks closely and 100, generally; 5% of research is generated internally.

William B. Allin is chief investment officer and client contact.

Gryphon Investment Counsel Inc.
2000 Peel St., Suite 710, Montreal, Quebec H3A 2W5; (514) 288-4122

Total assets managed	$5,543,000,000
Total discretionary	$5,543,000,000
Total tax-exempt	$5,543,000,000
Total discretionary tax-exempt	$5,543,000,000
For subsidiaries of U.S. firms	$1,062,000,000
Tax-exempt clients	73
U.S. subsidiaries	7
Types of accounts managed	CEFG
Minimum separate account	$50,000,000
No. of portfolio managers	7
Size of research staff	2

Gryphon Investment Counsel Inc., a Canadian firm, is an active equity, active bond, balanced and short-term manager.

Its equity approach uses sector rotation, market timing and fundamental analysis. Stock selection within sectors is dependent upon in-house research.

Its fixed-income approach emphasizes active interest rate timing, with goals of preservation and enhancement of capital. Concentration is in high-quality marketable bonds and cash, when appropriate.

The asset mix Jan. 1 was 28.1% Canadian stocks, 8.2% U.S. stocks, 44.4% bonds and 19.3% cash.

It follows 200 stocks closely and 400, generally; 60% of research is generated internally.

Ronald E.F. Kaulbach is chief investment officer and client contact.

G.T. Capital Management
50 California St., 27th Floor, San Francisco, Calif. 94111; (415) 392-6181

Total assets managed	$9,463,000,000
Total discretionary	$9,463,000,000
Total tax-exempt assets	$434,000,000
Total discretionary tax-exempt	$434,000,000
International equity assets	$400,000,000
Tax-exempt clients	5
Types of accounts managed	CF
Minimum separate account	$10,000,000
No. of portfolio managers	29
Size of research staff	4

G.T. Capital Management Inc. is an active domestic and international/global equity and fixed-income, global venture capital and short-term manager.

Its equity approach emphasizes early identification of major international trends, targeting appropriate countries and companies through which to exploit these trends. It seeks growth companies with undiscounted earnings acceleration.

Its fixed-income approach focuses on currency management, emphasizing flexible maturity rates. Options and fixed-income futures are used.

The asset mix Jan. 1 was 91% international equities and 9% cash.

The firm follows 770 stocks closely and 2,120, generally; 50% of the research is generated internally.

The parent is G.T. Management PLC.

F. Christian Wignall is chief investment officer; Earle A. Malm II is client contact.

The Guaranty Trust Co. of Missouri
7701 Forsyth, Suite 1200, St. Louis, Mo. 63105; (314) 725-9055

Total assets managed	$255,000,000
Total discretionary assets	$255,000,000
Total tax-exempt assets	$33,000,000
Total discretionary tax-exempt	$33,000,000
401(k)/457 plan assets	$750,000
Tax-exempt clients	37
Types of accounts managed	CFG
Minimum separate account	$300,000
No. of portfolio managers	3

The Guaranty Trust Co. of Missouri is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach focuses on growth stocks. The fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 35% stocks, 40% bonds and 25% cash.

The bank follows 250 stocks closely and 400, generally; 20% of research is generated internally.

The parent is Central Bancompany Inc.

Randy J. Schofield is chief investment officer; Jack A. Dempsey is client contact.

Guardian Capital Inc.
110 Yonge St., 18th Floor, Toronto, Ontario M5C 1T4; (416) 364-8341

Total assets managed	$1,471,000,000
Total discretionary	$1,471,000,000
Total tax-exempt	$625,000,000
Total discretionary tax-exempt	$625,000,000
For subsidiaries of U.S. firms	$189,000,000
Tax-exempt clients	30
U.S. subsidiaries	6
Types of accounts managed	CFG
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	4

Guardian Capital Inc., a Canadian firm, is an active equity, active fixed-income, balanced, active international/global equity and fixed-income, and short-term manager.

Its equity approach stresses core management with a value tilt in medium-cap stocks. Its fixed-income approach uses interest rate anticipation and emphasizes management of duration, sector weightings, currency exposure and opportunity trading.

The asset mix Jan. 1 was 35% Canadian stocks, 10% U.S. stocks, 40% bonds and 15% cash.

Mark A.F. Golding is chief investment officer; Huntly Christie is client contact.

Guardian Timing Services
130 Bloor St. W., 11th Floor, Toronto, Ontario M5S 1N5; (416) 924-1522

Total assets managed	$10,000,000
Total discretionary	$10,000,000
Total tax-exempt	$10,000,000
Total discretionary tax-exempt	$10,000,000
Types of accounts managed	C
No. of portfolio managers	1

Guardian Timing Services, a Canadian firm, is an active equity manager.

The firm offers market timing and portfolio insurance services, applying those techniques to equity indexed funds.

Jean-Pierre Fruchet is chief investment officer and client contact.

Gulf Investment Management Inc.
820 Gessner, Suite 720, Houston, Texas 77024; (713) 461-0660

Total assets managed	$407,000,000
Total discretionary	$377,000,000
Total tax-exempt assets	$321,000,000
Total discretionary tax-exempt	$321,000,000
Tax-exempt clients	29
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	3

Gulf Investment Management Inc. is an active equity and balanced manager.

Its equity approach uses a Graham & Dodd intrinsic value approach with an emphasis on out-of-favor securities. Two investment disciplines underlie its buy/sell decisions.

The asset mix Jan. 1 was 92% equities, 5% bonds and 3% cash.

The firm follows 50 stocks closely and 250, generally; 50% of research is generated internally.

Thomas G. Macrini is chief investment officer; T.C. Toomey is client contact.

GW Capital Inc.
10800 N.E. Eighth St., Bellevue, Wash. 98004; (206) 646-9336

Total assets managed	$25,000,000
Total discretionary	$25,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$3,000,000
No. of portfolio managers	1

GW Capital Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is value oriented, using sector rotation and growth and low p/e stocks. Its fixed-income approach uses sector rotation and interest rate anticipation.

The asset mix Jan. 1 was 45% stocks and 55% bonds.

The firm follows 35 stocks closely and 100, generally; 35% of research is generated internally.

Guy Watanabe is chief investment officer; Patricia Campbell is client contact.

H

Hagler, Mastrovita & Hewitt
1 International Place, Suite 3190, Boston, Mass. 02110; (617) 439-0440

Total assets managed	$1,620,000,000
Total discretionary	$1,620,000,000
Total tax-exempt assets	$1,386,000,000
Total discretionary tax-exempt	$1,386,000,000
401(k)/457 assets managed	$135,000,000
Tax-exempt clients	18
Types of accounts managed	CEFG
Minimum separate account	$50,000,000
No. of portfolio managers	3

Hagler, Mastrovita & Hewitt Inc. is an active equity and balanced manager.

Its equity approach identifies value, concentrating on major decisions and careful attention to risk management. Its fixed-income approach is focused on quality and maturity decisions, comparing expected returns and risks across the market spectrum.

The asset mix Jan. 1 was 70% stocks, 9% bonds and 21% cash.

The firm follows 75 stocks closely and 150, generally; 30% of the research is generated internally.

The parent is United Asset Management.

Robert P. Mastrovita is chief investment officer; John L. Hagler is client contact.

W.A. Haker Investment Management Inc.
815 E. Mason St., Suite 1501, Milwaukee, Wis. 53202 (414) 278-0590

Total assets managed	$50,000,000
Total discretionary	$50,000,000
Total tax-exempt assets	$18,000,000
Total discretionary tax-exempt	$18,000,000
Tax-exempt clients	20
Types of accounts managed	CJ
Minimum separate account	$300,000
No. of portfolio managers	2
Size of research staff	2

W.A. Haker Investment Management Inc. is an active equity, active bond, balanced and short-term manager.

Its equity approach focuses on growth stocks. Its fixed-income approach is based on interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 40% stocks, 52% bonds and 8% cash.

The firm follows 50 stocks closely and 70, generally; 25% of the research is generated internally.

William A. Haker is chief investment officer; Mark R. Zellmer is client contact.

Hallmark Capital Management Inc.
100 Passaic Ave., Fairfield, N.J. 07004; (210) 808-4144

Total assets managed	$192,000,000
Total discretionary	$192,000,000
Total tax-exempt assets	$173,000,000
Total discretionary tax-exempt	$173,000,000
Tax-exempt clients	29
Types of accounts managed	CEFJ
Minimum separate account	$3,000,000
No. of portfolio managers	2
Size of research staff	1

Hallmark Capital Management Inc. is an active equity and balanced account manager.

Its value-oriented equity approach uses Graham and Dodd analysis and low p/e stocks. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 50% stocks, 41% bonds and 9% cash.

The firm follows 60 stocks closely and 600, generally; 40% of the research is generated internally.

The parent is The Prudential Insurance Co. of America.

Robert L. Ardizzone is chief investment officer; Peter S. Hagerman is client contact.

Hambrecht & Quist Equity Management
1 Bush St., Suite 1100, San Francisco, Calif. 94104; (415) 986-5115

Total assets managed	$55,000,000
Total discretionary	$55,000,000
Total tax-exempt assets	$54,000,000
Total discretionary tax-exempt	$54,000,000
Tax-exempt clients	10
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	3

Hambrecht & Quist Equity Management, an active equity manager, invests in emerging growth stocks. It focuses on small-cap, high-growth stocks using both quantitative and qualitative measures.

The firm follows 250 stocks closely; 80% of research is generated internally.

Michael T. Jackson is chief investment officer; Kathleen M. Chalberg is client contact.

Hamilton, Allen & Associates Inc.
229 Peachtree St. N.E., Suite 900, Atlanta, Ga. 30303; (404) 659-6060

Total assets managed	$1,018,000,000
Total discretionary	$1,018,000,000
Total tax-exempt assets	$956,000,000
Total discretionary tax-exempt	$956,000,000
Tax-exempt clients	129
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	1

Hamilton, Allen & Associates Inc. is an active equity, active fixed-income and balanced account manager.

Its equity approach is based on selecting superior growth companies from a pre-screened universe based on earnings and valuation criteria.

Its fixed-income approach is based on yield curve analysis, using only Treasury and agency securities.

The asset mix Jan. 1 was 37% stocks, 54% bonds and 9% cash.

The firm follows 200 stocks closely; 75% of research is generated internally.

The parent is United Asset Management.

Samuel E. Allen and Roger C. Hamilton are the chief investment officers; William M. Robertson is client contact.

Hamilton Management Group Inc.
3775 NCNB Plaza, Charlotte, N.C. 28280; (704) 358-9808

Total assets managed	$18,000,000
Total discretionary	$18,000,000
Total tax-exempt assets	$16,000,000
Total discretionary tax-exempt	$16,000,000
Tax-exempt clients	8
Types of accounts managed	C
Minimum separate account	$50,000
No. of portfolio managers	1
Size of research staff	1

Hamilton Management Group Inc. is an active equity, balanced and real estate securities manager.

Its equity approach focuses on large-capitalization stocks that offer relative value and best represent all of the primary S&P 500 sector weightings. Options are used.

Its fixed-income approach takes advantage of sinking fund and call price features on bonds and

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

preferred stocks to provide shorter duration portfolios with attractive current yields.

The asset mix Jan. 1 was 64% stocks, 12% bonds, 2% cash and 22% preferred stock.

The firm follows 50 stocks closely and 150, generally; 75% of research is generated internally.

Peter J. Shintay is chief investment officer and client contact.

John Hancock Capital Growth Management

1138 Taylor St., San Francisco, Calif. 94108; (415) 775-9400

See entry for JOHN HANCOCK FINANCIAL SERVICES.

John Hancock Energy Resources Management

John Hancock Financial Services, P.O. Box 111, Boston, Mass. 02117; (617) 572-4523

See entry for JOHN HANCOCK FINANCIAL SERVICES.

John Hancock Financial Services

P.O. Box 111, Boston, Mass. 02117; (617) 572-4523

Total assets managed	$43,946,000,000
Total discretionary assets	$43,946,000,000
Total tax-exempt assets	$19,388,000,000
Discretionary tax-exempt	$19,388,000,000
GICs	$9,746,000,000
Annuities	$2,420,000,000
Equity real estate assets	$592,000,000
Mortgage assets	$6,668,000,000
International equity assets	$15,000,000
401(k)/457 assets managed	$8,450,000,000
Tax-exempt clients	337
Types of accounts managed	CEFGJ

John Hancock Financial Services, through its subsidiaries, is an active and passive equity, active fixed-income, balanced, real estate, passive international equity, short-term, GIC, venture capital, timber, private placements, capital growth and alternative energy manager. Options and fixed-income futures are used.

Equity and fixed-income investments are managed by Independence Investment Associates, profiled separately in this issue.

Foster L. Aborn is the chief investment officer; Endicott Peabody Jr. is client contact.

The assets of the following four subsidiaries and one investment group are included in the data above.

John Hancock Properties, a real estate manager, manages $564 million in discretionary tax-exempt assets. The firm offers a full range of equity-oriented investments, including pooled and individual accounts, joint ventures and direct investments in commercial real estate.

Kevin McGuire is chief investment officer; James H. Patterson is client contact.

The Hancock Timber Resource Group manages $881 million in discretionary tax-exempt assets. The firm provides active management of timber real estate investments through an affiliation with two nationally recognized forestry firms. Both pooled and individual accounts are offered.

William R. Gordon is chief investment officer; Richard Smith is client contact.

John Hancock Venture Capital manages $834 million in discretionary tax-exempt assets. Diversification is achieved by direct investment in venture capital companies and other venture capital partnerships, as well as through investment in various stages of development, industry and geography. Pooled and individual accounts are offered.

Edward Kane and Brooks Zug are managing directors; Mr. Peabody is client contact.

John Hancock Capital Growth Management runs $155 million in discretionary tax-exempt assets. It offers mezzanine financing primarily to privately held, emerging, non-high-tech companies.

Dexter B. Dawes is chief investment officer; Mr. Peabody is client contact.

John Hancock Energy Resources Management Inc., a co-owner with general partners, manages $160 million in assets. Funds are invested in independent power projects.

John Hancock Properties

2 Copley Place, Boston, Mass. 02117; (617) 572-3822

See entry for JOHN HANCOCK FINANCIAL SERVICES.

John Hancock Timber Resource Group

John Hancock Financial Services, P.O. Box 111, Boston, Mass. 02117; (617) 572-4523

See entry for JOHN HANCOCK FINANCIAL SERVICES.

John Hancock Venture Capital Management Inc.

1 Financial Center, Boston, Mass. 02111; (617) 348-3707

See entry for JOHN HANCOCK FINANCIAL SERVICES.

Cross-border financing: May 27.

Hanson Investment Management Co.

4000 Civic Center Drive, Suite 200, San Rafael, Calif. 94903; (415) 499-1400

Total assets managed	$1,051,000,000
Total discretionary	$1,051,000,000
Total tax-exempt assets	$904,000,000
Total discretionary tax-exempt	$904,000,000
No. of portfolio managers	4
Size of research staff	2

Hanson Investment Management Co., an active equity and balanced manager, uses Graham & Dodd principles and low p/e stocks in its value-oriented, bottom-up equity approach. The firm emphasizes growth stocks at reasonable prices. Its fixed-income approach uses interest rate anticipation.

The firm follows 60 stocks closely; half of the research is generated internally.

The parent is United Asset Management.

Herbert M. Hanson Jr. is chief investment officer and client contact.

Harbor Capital Management

265 Franklin St., Suite 1800, Boston, Mass. 02110; (617) 439-4500

Total assets managed	$1,257,000,000
Total discretionary	$1,257,000,000
Total tax-exempt assets	$912,000,000
Total discretionary tax-exempt	$912,000,000
International equity assets	$11,000,000
International fixed-income	$11,000,000
Tax-exempt clients	59
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	5

Harbor Capital Management Co. Inc. is an active domestic and international equity, active domestic and international bond and balanced manager.

It employs a dual approach to equity, selecting growth stocks through a top-down discipline and value stocks through a bottom-up discipline. Portfolios have a maximum 60/40 tilt.

Its fixed-income approach emphasizes current income, credit quality and limited maturity risk. Maturity and sector adjustments are undertaken in a deliberate and systematic fashion.

The asset mix Jan. 1 was 37% stocks, 49% bonds and 14% cash.

The firm follows 125 stocks closely and 200, generally; 75% of the research is generated internally.

Frederick G.P. Thorne is chief investment officer; William S. Peck is client contact.

Harris Associates L.P.

2 N. LaSalle, Chicago, Ill. 60602; (312) 621-0600

Total assets managed	$3,194,000,000
Total discretionary	$3,194,000,000
Total tax-exempt assets	$1,159,000,000
Total discretionary tax-exempt	$1,159,000,000
401(k)/457 assets managed	$46,000,000
Tax-exempt clients	173
Types of accounts managed	CF
Minimum separate account	$5,000,000
No. of portfolio managers	10
Size of research staff	11

Harris Associates L.P., an active equity and balanced manager, takes a value-oriented approach that produces portfolios with p/e and price/book ratios less than market, yield and ROE greater than market and positive-low volatility rates of return. Its fixed income approach is passive.

The asset mix Jan. 1 was 33% stocks, 33% bonds and 34% cash.

The firm follows 100 stocks closely and 450, generally; 50% of the research is generated internally.

Myron R. Szold is chief investment officer; Albert A. Pisterzi is client contact.

P&I spotlights the fastest growing managers July 8.

Harris Investment Management Inc.

P.O. Box 755, 190 S. LaSalle, Chicago, Ill. 60302; (312) 461-7699

Total assets managed	$9,157,000,000
Total discretionary	$9,157,000,000
Total tax-exempt assets	$8,888,000,000
Total discretionary tax-exempt	$8,856,000,000
International equity assets	$25,000,000
Equity indexed assets	$400,000,000
Fixed-income indexed assets	$42,000,000
Dedicated/immunized assets	$482,000,000
Mortgage-backed assets	$900,000,000
401(k)/457 assets managed	$275,000,000
Tax-exempt clients	150
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	15
Size of research staff	8

Harris Investment Management Inc. is an active and passive equity, active and passive bond, balanced, active international/global equity, short-term, convertible and nuclear decommissioning trust manager.

Its primary equity approach is quantitative, incorporating a multifactor model with a strong value emphasis. Its fixed-income approach uses a structured decision-making process reliant on quantitative models to establish exposure in duration, term

LaSalle Advisors Limited

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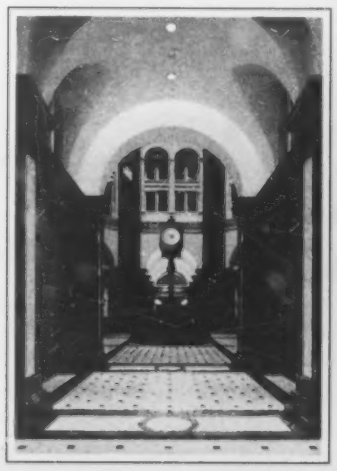

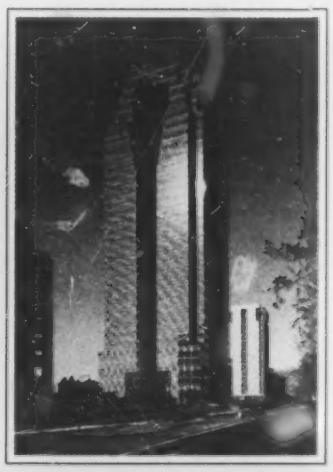

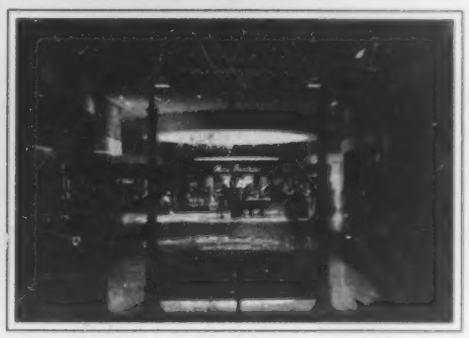

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structure and sector/quality. Options and financial futures are used for select accounts.

The asset mix Jan. 1 was 21% stocks, 27% bonds, 39% cash, 9% mortgage-backed securities and 4% convertibles.

Seventy percent of the research is generated internally.

The parent is Harris Bankcorp.

John C. Kirscher is chief investment officer; Robert E. Vanden Bosch and Randall C. Buck are client contacts.

Hartford Life Insurance Co.

P.O. Box 2999, Hartford, Conn. 06104-2999; (203) 843-8032

Total assets managed	$10,200,000,000
Total discretionary assets	$10,200,000,000
Total tax-exempt assets	$6,300,000,000
Total discretionary tax-exempt GICs	$6,300,000,000 $3,442,000,000
Equity real estate assets	$11,000,000
401(k)/457 assets managed	$1,300,000,000
Types of accounts managed	CEFG
No. of portfolio managers	13
Size of research staff	8

Hartford Life Insurance Co. is a domestic and international/global active equity, active domestic fixed-income, balanced, real estate and short-term manager.

Its equity approach emphasizes growth stocks. Long-term capital growth is obtained by maximizing the total return.

Its fixed-income approach uses interest rate anticipation, and anticipates changes in the yield curve, quality spreads and maturities. Strategies are based on close analysis of the interplay between the economy and financial markets. Options and fixed-income futures are used.

In real estate, it seeks a rising annual yield as net income increases, in hopes of obtaining significant appreciation.

The separate account asset mix Jan. 1 was 66% stocks, 15% bonds, 10% cash and 9% mortgage-backed securities.

The insurer follows 200 stocks closely and 250, generally; 25% of research is generated internally.

The parent is ITT.

Edward N. Bennett is chief investment officer; Charles A. Clinton is client contact.

J.M. Hartwell & Co. Inc

515 Madison Ave., 31st Floor, New York, N.Y. 10022; (212) 308-3355

Total assets managed	$499,000,000
Total discretionary	$499,000,000
Total tax-exempt assets	$243,000,000
Total discretionary tax-exempt	$243,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	1

J.M. Hartwell & Co. Inc. is an active equity manager.

Its equity approach uses growth stocks. The firm seeks companies with potential for above-average increases in revenues and earnings and that are in industries that are less affected by the business cycle and have the strongest prospects for unit volume growth.

The firm follows 75 stocks closely and 100, generally.

The parent is JMH Management.

William C. Miller IV is chief investment officer; Alexander Lazor is client contact.

Haven Capital Management

655 Third Ave., 19th Floor, New York, N.Y. 10017; (212) 953-2335

Total assets managed	$495,000,000
Total discretionary	$441,000,000
Total tax-exempt assets	$262,000,000
Total discretionary tax-exempt	$261,000,000
Tax-exempt clients	13
Types of accounts managed	CEF
No. of portfolio managers	5

Haven Capital Management Inc. is an active equity, fixed-income and balanced manager.

Its equity approach is growth at a reasonable price, based on individual issue selection of undervalued companies. Historical data are examined to identify attractively priced companies with above-average characteristics.

Its fixed-income approach is based on interest rate anticipation derived from economic cycle analysis. Maturity selection is followed by sector and quality judgments to produce consistent competitive returns with low volatility.

The asset mix Jan. 1 was 51% stocks, 35% bonds and 14% cash.

The firm follows 100 stocks closely and 200, generally; 50% of the research is generated internally.

Denes M. Turko is client contact.

Hawaiian Trust Co. Ltd.

P.O. Box 3170, Honolulu, Hawaii 96819; (808) 538-4622

Total assets managed	$6,200,000,000
Total discretionary assets	$4,100,000,000
Total tax-exempt assets	$1,500,000,000
Total discretionary tax-exempt	$1,500,000,000
401(k)/457 plan assets	$60,000,000
Tax-exempt clients	856
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	9
Size of research staff	2

Hawaiian Trust Co. Ltd. is an active domestic and international/global equity, active and passive fixed-income, balanced, real estate and short-term manager.

Its primary equity approach emphasizes growth stocks. In fixed income, it invests in top-quality bonds, using interest rate anticipation. For real estate, the firm invests in stocks of marketable real estate companies.

The asset mix Jan. 1 was 60% stocks, 35% bonds and 5% cash.

The bank follows 190 stocks closely and 1,000, generally; 95% of research is generated internally.

The parent is Bancorp Hawaii.

William J. Barton is chief investment officer and client contact.

Hawthorne Associates Inc.

401 Edgewater Place, Suite 600, Wakefield, Mass. 01880; (617) 245-5400

Total assets managed	$598,000,000
Total discretionary	$598,000,000
Total tax-exempt assets	$595,000,000
Total discretionary tax-exempt	$595,000,000
Equity real estate assets	$311,000,000
Tax-exempt clients	8
Types of accounts managed	CEFG
No. of portfolio managers	4

Hawthorne Associates Inc. is an active equity, active fixed-income, real estate and balanced manager.

Its equity approach uses high-quality growth stocks, focusing on each company's product, current and projected earnings, management team and competitive environment.

Its fixed-income approach is based on interest rate anticipation; U.S. Treasury issues and high-grade corporate and utility bonds are bought. By managing the creditworthiness of issuers and the maturity distribution, the portfolio's risk is minimized, income is produced and the protection of principle is achieved.

Its real estate approach seeks high-quality, institutional-grade real estate diversified by age, location and type.

In addition to the assets above, $74 million in discretionary tax-exempt assets are assigned to external managers.

The asset mix Jan. 1 was 44% stocks, 2% bonds, 2% cash and 52% equity real estate.

The firm follows 50 stocks closely and 200, generally.

Charles G. Dyer is chief investment officer; John C. Abbott is client contact.

HD International

126 E. 56th St., New York, N.Y. 10022; (212) 753-0600

Total assets managed	$1,375,000,000
Total discretionary	$1,375,000,000
Total tax-exempt assets	$747,000,000
Total discretionary tax-exempt	$747,000,000
International equity assets	$696,000,000
International fixed-income	$15,000,000,000
International cash assets	$36,000,000
Tax-exempt clients	19
Types of accounts managed	CG
Minimum separate account	$20,000,000
No. of portfolio managers	9

HD International is an international/global equity manager.

Its equity approach uses growth stocks and valuation control. The firm also specializes in regional European investments.

Options and stock index futures are used.

The asset mix Jan. 1 was 93% stocks, 2% bonds and 5% cash.

The firm follows 250 stocks closely; 40% of the research is generated internally.

James Heyworth-Dunne is chief investment officer; Francine R. Elster is client contact.

Heartland Capital Management

36 S. Pennsylvania, Suite 610, Indianapolis, Ind. 46204; (317) 633-4060

Total assets managed	$500,000,000
Total discretionary	$500,000,000
Total tax-exempt assets	$315,000,000
Total discretionary tax-exempt	$315,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	107
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	4

Heartland Capital Management is an active equity, active fixed-income and balanced manager.

Its equity selection process is growth-oriented, with an emphasis on accelerating earnings per share. Its fixed-income approach uses interest rate anticipation.

The firm follows 50 stocks closely and 100, generally; 40% of the research is generated internally.

Barry F. Ebert is chief investment officer; Hilary S. Salatich is client contact.

Heilweil Hollander Jacobs

400 Perimeter Center Terraces, Suite 785, Atlanta, Ga. 30346; (404) 393-8725

Total assets managed	$100,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$33,000,000
Total discretionary tax-exempt	$33,000,000
Tax-exempt clients	59
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	3

Hellwel Hollander Jacobs Inc. is an active equity, passive bond, balanced and short-term manager.

In equities, the firm takes a defensive value approach, concentrating on capital preservation and appreciation. Investments are made when prospects for further price deterioration seem minimal with strong potential for significant appreciation. Options are used.

The asset mix Jan. 1 was 45% stocks, 25% bonds and 30% cash.

The firm follows 16 stocks closely and 30, generally; 90% of the research is generated internally.

Marc Heilweil is chief investment officer; Brenda Domen is client contact.

Heitman Advisory Corp.

180 N. LaSalle St., Chicago, Ill. 60601; (312) 855-5700

Total assets managed	$6,300,000,000
Total discretionary	$6,300,000,000
Total tax-exempt assets	$5,500,000,000
Total discretionary tax-exempt	$5,500,000,000
Equity real estate assets	$5,500,000,000
Tax-exempt clients	77
Types of accounts managed	CEFGJ
Minimum separate account	$25,000,000
No. of portfolio managers	13
Size of research staff	3

Heitman Advisory Corp., an equity real estate manager, stresses selection and acquisition of existing, investment-quality, well-rented properties, including office buildings, shopping centers and industrial parks. This provides the potential for increased cash return on investments with limited risk. Property management and leasing are handled through an affiliate, Heitman Properties.

The asset mix Jan. 1 was 100% equity real estate.

The parent is Heitman Financial Services Ltd.

Norman Perlmutter is chief investment officer; David Glickman is client contact.

Hellman, Jordan Management Co. Inc.

50 Milk St., Boston, Mass. 02109; (617) 482-1777

Total assets managed	$1,391,000,000
Total discretionary	$1,391,000,000
Total tax-exempt assets	$1,195,000,000
Total discretionary tax-exempt	$1,195,000,000
Tax-exempt clients	25
Types of accounts managed	CEFG
No. of portfolio managers	4
Size of research staff	1

Hellman, Jordan Management Co. Inc., an active equity manager, is growth-oriented. The investment approach is characterized by concentration, risk aversion and intellectual flexibility.

The asset mix Jan. 1 was 97.8% equities and 2.2% cash.

Gerald R. Jordan Jr. is chief investment officer; David M. Driscoll is client contact.

Henderson Administration Group PLC

3 Finsbury Ave., London EC2M 2PA U.K.; 71-410-4332

Total assets managed	$13,381,000,000
Total discretionary	$13,381,000,000
Total tax-exempt assets	$51,000,000
Total discretionary tax-exempt	$51,000,000
International equity assets	$45,000,000
International cash assets	$6,000,000
Tax-exempt clients	2
Types of accounts managed	F
Minimum separate account	$20,000,000
No. of portfolio managers	44

Henderson Administration Group PLC is an active domestic and international/global equity, active domestic and international/global fixed-income and balanced manager.

The firm uses a top-down global equity approach, concentrating primarily on investing in fast-growing economies and markets. Stock selection focuses on earnings momentum, emphasizing growth stocks.

In global fixed income, it concentrates on identifying relative value through forecasting both interest rate and currency rate movements. Both liquidity and quality are essential. The firm focuses primarily on sovereign debt. Options and financial futures are used.

The asset mix Jan. 1 was 89% stocks and 11% cash.

The firm follows 450 stocks closely and 1,000, generally; 25% of the research is generated internally.

Iain Clark is chief investment officer; Richard Garland is client contact.

Heritage Investors Management Corp.

7101 Wisconsin Ave., Suite 1112, Bethesda, Md. 20814; (301) 951-0440

Total assets managed	$221,000,000
Total discretionary	$219,000,000
Total tax-exempt assets	$77,000,000
Total discretionary tax-exempt	$77,000,000
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	4

Heritage Investors Management Corp. is an active equity, active fixed-income and balanced manager.

Its bottom-up approach concentrates on medium- to large-capitalization undervalued stocks.

Its fixed-income approach focuses on interest rate anticipation. Securities have maturities of one to 15 years, and mainly are Treasuries and investment-grade corporate issues.

The asset mix Jan. 1 was 18% stocks, 53% bonds and 29% cash.

The firm follows 100 stocks closely and 250, generally; 75% of research is generated internally.

Michael S. Cornfeld is chief investment officer and client contact.

Hibernia National Bank

P.O. Box 61540, New Orleans, La. 70160; (504) 586-5638

Total assets managed	$7,779,000,000
Total discretionary assets	$2,608,000,000
Total tax-exempt assets	$5,917,000,000
Total discretionary tax-exempt	$1,873,000,000
Real estate equity assets	$34,000,000
Tax-exempt clients	866
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	7
Size of research staff	2

Hibernia National Bank is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach is based on a quantitative style, emphasizing earnings growth. Primary focus is equity selection in the context of a disciplined portfolio construction process.

Its fixed-income approach is based on sector management to achieve higher yield to maturity than comparable indexes while maintaining duration and convexity similar to the indexes used as benchmarks.

Its asset mix Jan. 1 was 16.8% stocks, 56.7% bonds, 18.5% cash, 1.8% equity real estate and 6.2% other.

The bank follows 250 stocks closely and 1,100, generally; 20% of research is generated internally.

The parent is Hibernia Corp.

Robert L. Rust is chief investment officer; Janet W. Rabalais is client contact.

Hill Samuel/Investment Advisers Ltd.

110 Dain Tower, Box 357, Minneapolis, Minn. 55440; (612) 371-7780

Total assets managed	$827,000,000
Total discretionary	$827,000,000
Total tax-exempt assets	$827,000,000
Total discretionary tax-exempt	$827,000,000
International equity assets	$817,000,000
International fixed-income	$10,000,000
Tax-exempt clients	30
Types of accounts managed	CEFJ
Minimum separate account	$15,000,000
No. of portfolio managers	25
Size of research staff	17

Hill Samuel Investment Advisers Ltd. is an active international/global equity and fixed-income manager.

The firm has a quantified approach to value investing. A consistent methodology is used in analyzing all world markets, securities and currencies.

The asset mix Jan. 1 was 99% international equities and 1% international bonds.

The firm follows 200 stocks closely and 2,000 generally; 85% of research is generated internally.

The parent is TSB Group PLC.

Roy Gillson is chief investment officer; Anne F. Holloran is client contact.

Hilliard Lyons Investment Management Group

P.O. Box 32760, Louisville, Ky. 40232; (502) 588-8456

Total assets managed	$1,100,000,000
Total discretionary	$1,100,000,000
Total tax-exempt assets	$500,000,000
Total discretionary tax-exempt	$500,000,000
401(k)/457 plan assets	$100,000,000
Tax-exempt clients	300
Types of accounts managed	CEFJ
Minimum separate account	$100,000
No. of portfolio managers	11

Hilliard Lyons Investment Management Group is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, emphasizing low p/e stocks. The fixed-income approach is passive.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

The firm follows 500 stocks closely.

The parent is J.J.B. Hilliard, W.L. Lyons Inc.

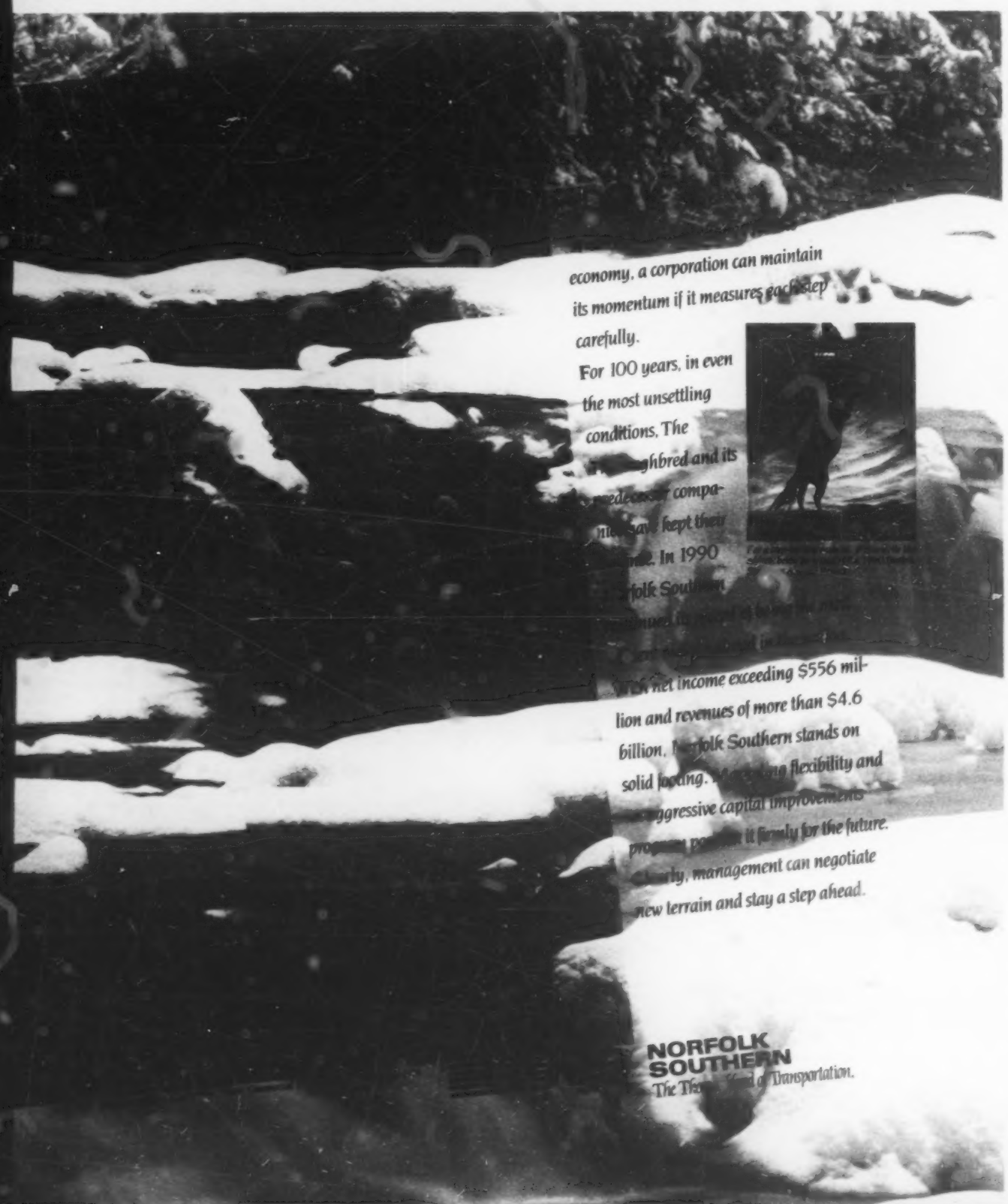
Samuel C. Harvey is chief investment officer; Don C. Graetar is client contact.

M.D. Hirsch Investment Management Inc.

522 Fifth Ave., Suite 1600, New York, N.Y. 10036; (212) 391-6670

Total assets managed	$325,000,000
Total discretionary assets	$325,000,000
Total tax-exempt assets	$200,000,000
Total discretionary tax-exempt	$200,000,000
International equity assets	$2,000,000
401(k)/457 plan assets	$15,000,000
Types of accounts managed	CJ
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	2

M.D. Hirsch Investment Management Inc. is an active equity, active fixed-income and balanced manager.



Its multifund approach seeks consistent, risk-averse returns through a two-phase approach: focusing on macro issues to delineate asset allocation, then carefully selecting a group of mutual funds to focus on micro (industry/individual securities) issues.

The asset mix Feb. 1 was 45% stocks, 43% bonds and 12% cash.

The firm was created Feb. 1 from a division of Republic National Bank of New York, its parent.

Michael D. Hirsch is chief investment officer and client contact.

Hodges Capital Management

755 West End Ave., New York, N.Y. 10025; (212) 866-5334

Total assets managed	$26,000,000
Total discretionary	$23,000,000
Total tax-exempt assets	$20,000,000
Total discretionary tax-exempt	$20,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	3
Types of accounts managed	CEF
Minimum separate account	$2,000,000
No. of portfolio managers	1

Hodges Capital Management is an active equity, passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, promising low multiple stocks. In fixed income, the firm uses a passive approach with staggered maturities up to three years.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

The firm follows 50 stocks closely and 200, generally; 75% of the research is generated internally.

Fletcher Hodges III is chief investment officer and client contact.

Hodgson Roberton Laing

1 Queen St. E., Suite 1920, Toronto, Ontario M5C 2Y5; (416) 869-3320

Total assets managed	$1,315,000,000
Total discretionary	$1,315,000,000
Total tax-exempt	$1,211,000,000
Total discretionary tax-exempt	$1,211,000,000
For subsidiaries of U.S. firms	$38,000,000
Dedicated/immunized assets	$40,000,000
Tax-exempt clients	37
U.S. subsidiaries	1
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	2

Hodgson Roberton Laing Ltd., a Canadian firm, is an active domestic and international equity, active and passive domestic fixed-income, tactical asset allocation, short-term and balanced manager.

In equities, the firm is a value investor, employing a contrarian, opportunistic approach. Sector rotation is used, managing concentrated portfolios. Low p/e, price/book stocks and Graham & Dodd analysis are used.

Its fixed-income approach emphasizes interest rate anticipation. The credit composition is structured to take advantage of pricing anomalies. Sector analysis also is used.

The asset mix Jan. 1 was 27% Canadian stocks, 8% U.S. stocks, 58% bonds, 7% cash.

It follows 250 stocks closely and 400, generally; 95% of research is generated internally.

J. Warren Laing is chief investment officer; Wayne D. Beazer is client contact.

Hoisington Investment Management Co.

950 Echo Lane, Suite 210, Houston, Texas 77024; (713) 467-7900

Total assets managed	$1,200,000,000
Total discretionary	$1,200,000,000
Total tax-exempt assets	$1,200,000,000
Total discretionary tax-exempt	$1,200,000,000
Tax-exempt clients	30
Types of accounts managed	CFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	1

Hoisington Investment Management Co., an active fixed-income manager, uses a risk-averse, market-timing approach. Very short maturities are used during periods of high risk, while 30-year maturities capitalize on low-risk periods.

All assets were in bonds Jan. 1.

Van R. Hoisington is chief investment officer; Janice Teague Green is client contact.

Holt-Smith and Renk Inc.

Essex Square, 4274 E. Towne Blvd., Suite 204, Madison, Wis. 53704; (608) 249-4488

Total assets managed	$16,000,000
Total discretionary	$16,000,000
Total tax-exempt assets	$7,000,000
Total discretionary tax-exempt	$7,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	16
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	2

Holt-Smith and Renk Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes growth at reasonable prices. Equities are screened for above-average sales and earnings growth prospects, strong balance sheets and low institutional ownership. It is a conservative and controlled risk approach.

In fixed income, the average maturity varies from two to 10 years and core holdings are investment-grade bonds. Market momentum, federal policy, commodity prices and sentiment are among factors analyzed for the interest rate strategy.

The asset mix Jan. 1 was 35% stocks, 50% bonds and 15% cash.

The firm follows 30 stocks closely and 100, generally; 25% of research is generated internally.

Marilyn Holt-Smith is chief investment officer and client contact.

Horgan Tattersall Investment Counsel Ltd.

Suite 1904, P.O. Box 95, 20 Queen St. W., Toronto, Ontario M5H 3R3; (416) 979-1818

Total assets managed	$120,000,000
Total discretionary	$120,000,000
Total tax-exempt	$70,000,000
Total discretionary tax-exempt	$70,000,000
For subsidiaries of U.S. firms	$4,000,000
Tax-exempt clients	7
U.S. subsidiaries	1
Types of accounts managed	CG
Minimum separate account	$5,000,000
No. of portfolio managers	2

Horgan Tattersall Investment Counsel Ltd., a Canadian firm, is an active small-cap stock manager using a value-oriented approach.

All assets were in small-cap stocks Jan. 1.

It follows 80 stocks closely and 200, generally; 75% of research is generated internally.

Robert Tattersall is chief investment officer; Richard D.W. Howson is client contact.

Horsley Keogh Associates

505 Montgomery St., San Francisco, Calif. 94111; (415) 986-7733

Total assets managed	$550,000,000
Total discretionary	$550,000,000
Total tax-exempt assets	$500,000,000
Total discretionary tax-exempt	$500,000,000
Tax-exempt clients	15
Types of accounts managed	CEG
Minimum separate account	$20,000,000
No. of portfolio managers	5
Size of research staff	5

Horsley Keogh Associates Inc. is a venture capital manager.

The firm selects venture capital partnerships that have prospects for exceptional investment returns, and manages the sale of publicly traded securities distributed by these partnerships.

Phillip Horsley is chief investment officer; G.C. Belden Jr. is client contact.

Hotchkis and Wiley

800 W. Sixth St., Suite 540, Los Angeles, Calif. 90017; (213) 623-4073

Total assets managed	$3,771,000,000
Total discretionary	$3,771,000,000
Total tax-exempt assets	$3,564,000,000
Total discretionary tax-exempt	$3,564,000,000
International equity assets	$30,000,000
Tax-exempt clients	41
Types of accounts managed	CEFG
Minimum separate account	$25,000,000
No. of portfolio managers	8
Size of research staff	1

Hotchkis and Wiley is an active international and domestic equity and balanced manager.

Its equity approach uses Graham & Dodd analysis and emphasizes preservation of capital and the power of dividend return compounded.

The asset mix Jan. 1 was 87% stocks, 8% bonds and 5% cash.

The firm follows 200 stocks closely and 1,000, generally; 60% of research is generated internally.

George Rebhan is client contact.

Hourglass Capital Management Inc.

400 N. St. Paul, Suite 840, Dallas, Texas 75201; (214) 754-8750

Total assets managed	$109,000,000
Total discretionary	$109,000,000
Total tax-exempt assets	$109,000,000
Total discretionary tax-exempt	$109,000,000
Tax-exempt clients	6
Types of accounts managed	CFG
Minimum separate account	$1,000,000
No. of portfolio managers	4

Hourglass Capital Management Inc. is an active equity and balanced manager.

Its equity approach emphasizes growth stocks, integrating top-down and bottom-up approaches. In fixed income, it uses a laddered maturity approach with an emphasis on high-quality intermediate maturity bonds.

The asset mix Jan. 1 was 53% stocks, 31% bonds and 16% cash.

The firm follows 50 stocks closely and 150, generally; 60% of research is generated internally.

Hilton Hemphill is chief investment officer and client contact.

Howard and McInnes Inc.

248 E. Capitol St., Suite 820, Trustmark Bldg., Jackson, Miss. 39201; (601) 948-0952

Total assets managed	$1,000,000
Total discretionary	$1,000,000
Total tax-exempt assets	$84,000
Total discretionary tax-exempt	$84,000
Tax-exempt clients	1
Types of accounts managed	F
No. of portfolio managers	2

Howard and McInnes Inc., an active equity manager, uses a contrarian, value-oriented, low p/e approach that focuses on fundamentally strong companies that are temporarily out of favor.

The asset mix Jan. 1 was 99.2% stocks and 0.8% cash.

The firm follows 30 stocks closely and 75, generally; all research is generated internally.

Judith B. Howard is chief investment officer; Robert W. McInnes is client contact.

Howe & Rusling Inc.

120 East Ave., Rochester, N.Y. 14604; (716) 325-4140

Total assets managed	$311,000,000
Total discretionary	$311,000,000
Total tax-exempt assets	$126,000,000
Total discretionary tax-exempt	$126,000,000
Tax-exempt clients	85
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	6
Size of research staff	2

Howe & Rusling Inc. is an active equity, active fixed-income, balanced and short-term manager.

For equities, it is value-oriented, seeking companies whose stocks are trading at low p/es relative to historical levels, the market and expected earnings. In fixed-income, it uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 50% stocks, 30% bonds and 20% cash.

The firm follows 50 stocks closely and 100, generally; 25% of the research is generated internally.

The parent is KeyCorp.

Thomas G. Rusling is chief investment officer; Robert B. Wolf is client contact.

Huntington Trust Co.

Huntington Center, Columbus, Ohio 43287; (614) 463-5345

Total assets managed	$1,800,000,000
Total discretionary	$1,500,000,000
Total tax-exempt assets	$700,000,000
Total discretionary tax-exempt	$600,000,000
401(k)/457 assets managed	$100,000,000
Tax-exempt clients	250
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	10

Huntington Trust Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes dividend growth. Its fixed-income approach uses sector analysis.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

The firm follows 50 stocks closely and 225, generally; all research is generated internally.

The parent is Huntington Bancshares.

James M. Buskirk is chief investment officer; Karen Barrett is client contact.

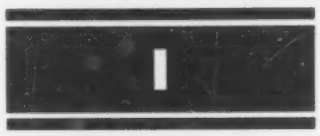
Hutson Management Co.

477 Madison Ave., 14th Floor, New York, N.Y. 10022; (212) 832-8540

Total assets managed	$275,000,000
Total discretionary	$275,000,000
Total tax-exempt assets	$275,000,000
Total discretionary tax-exempt	$275,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$25,000,000
No. of portfolio managers	2
Size of research staff	3

Hutson Management Co., an active equity manager, predicates its investment philosophy on a disciplined quantitative approach to equity selection. Stocks must satisfy specific criteria for earnings growth.

Heinz Hutzler is chief investment officer; Lew Sonn is client contact.



IAA Trust Co.

1701 Towanda Ave., P.O. Box 2901, Bloomington, Ill. 61701; (800) 422-8261

Total assets managed	$3,497,000,000
Total discretionary assets	$3,388,000,000
Total tax-exempt assets	$214,000,000
Total discretionary tax-exempt	$105,000,000
Tax-exempt clients	152
Types of accounts managed	CF
Minimum separate account	$200,000
No. of portfolio managers	10

IAA Trust Co. is an active domestic and international/global equity and fixed-income, balanced and short-term manager.

Its value-oriented growth equity portfolio emphasizes smaller-cap stocks selling at a reasonable p/e ratio and sector rotation. In fixed income, it anticipates changes in the yield curve, with incremental return enhanced through interest rate anticipation.

The asset mix Jan. 1 was 21% stocks, 70% bonds and 9% cash.

The bank follows 100 stocks closely and 200, generally; 20% of research is generated internally.

The parent is Illinois Agricultural Association.

Gary E. Mede is chief investment officer; Dave Tipsword is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

ICH Capital Management Group

100 Mallard Creek Road, Suite 400, Louisville, Ky. 40207; (502) 894-2170

Total assets managed	$4,519,000,000
Total discretionary assets	$4,519,000,000
Total tax-exempt assets	$931,000,000
Total discretionary tax-exempt	$930,000,000
GICs	$930,000,000
Equity real estate assets	$1,000,000
Mortgage assets	$2,000,000
Mortgage-backed assets	$440,000,000
401(k)/457 assets managed	$930,000,000
Tax-exempt clients	400
Types of accounts managed	CG
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	7

ICH Capital Management Group, a GIC manager, uses sector analysis and quantitative analysis of the value of imbedded ontions in variable cash flow securities to reach portfolio decisions. Analytical not credit risk is the key factor. Options and fixed-income futures are used.

In addition to the figures above, $10 million is managed on the firm's behalf by another management firm.

The parent is ICH Corp.

The figures above include statistics for Constitution Life Insurance Co., Southwestern Life Insurance and Bankers Life & Casualty.

Ronald H. Thelin Jr. is chief investment officer; John R. Lindholm is client contact.

ICM Asset Management Inc.

W. 601 Main Ave., Suite 917, Spokane, Wash. 99201; (509) 455-3588

Total assets managed	$114,000,000
Total discretionary	$114,000,000
Total tax-exempt assets	$75,000,000
Total discretionary tax-exempt	$75,000,000
Tax-exempt clients	48
Types of accounts managed	CEFJ
Minimum separate account	$100,000
No. of portfolio managers	5
Size of research staff	1

ICM Asset Management Inc. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach places emphasis on the selection of companies with good unit growth potential or undervalued stocks and market sectors. Its fixed-income approach stresses quality and maturity weighting with low turnover.

The asset mix Jan. 1 was 27.4% stocks, 46.8% bonds and 25.8% cash.

The firm follows 44 stocks closely and 100, generally; all research is generated internally.

James M. Simmons is chief investment officer; Steven King Noff is client contact.

IDC Portfolio Management

300 Cottonwood Ave., Hartland, Wis. 53029; (414) 367-6868

Total assets managed	$319,000,000
Total discretionary	$299,000,000
Total tax-exempt assets	$63,000,000
Total discretionary tax-exempt	$58,000,000
Tax-exempt clients	4
Types of accounts managed	CG
Minimum separate account	$500,000

IDC Portfolio Management Inc. is an active equity and fixed-income manager.

Its equity approach is to actively manage a high dividend yield utility common stock portfolio of large-cap, high-quality utilities with safe, secure income streams. Options are used.

Its fixed-income approach allocates assets between bonds and cash, depending on interest rate forecasts.

As of Jan. 1, all assets were in bonds.

John E. Rickmeier is chief investment officer. Mickey Miller is client contact.

IDS Equity Advisors/IDS Fixed-Income Advisors

IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-1335

Total assets managed	$5,331,000,000
Total discretionary	$5,331,000,000
Total tax-exempt assets	$4,137,000,000
Total discretionary tax-exempt	$4,137,000,000
Mortgage-backed assets	$41,000,000
Tax-exempt clients	54
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	33

IDS Equity Advisors/IDS Fixed-Income Advisors is an active equity, active fixed-income and balanced manager.

IDS Equity Advisors manages large-cap, "blue chip" stock portfolios using a sector rotational approach. IDS Fixed-Income Advisors manages fixed-income portfolios using a top-down, sector rotational approach. Options and stock index futures are used with client's approval.

The asset mix Jan. 1 was 74% stocks, 18% bonds, 7% cash and 1% mortgage-backed securities.

The firm follows 100 stocks closely and 400, generally; 80% of the research is generated internally.

The parent is IDS Financial Corp., a subsidiary of American Express Co.

Peter J. Anderson is chief investment officer of IDS Advisory Group; Edward Labenski is chief investment officer of IDS Fixed-Income Advisors; Diane K. Vener is client contact.

IDS Financial Services (Wealth Management Service)

IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-3131

Total assets managed	$124,000,000
Total discretionary	$124,000,000
Total tax-exempt assets	$11,000,000
Total discretionary tax-exempt	$11,000,000
International equity assets	$300,000
Tax-exempt clients	100
Types of accounts managed	CEFGJ
Minimum separate account	$75,000
No. of portfolio managers	5
Size of research staff	33

IDS Financial Services (Wealth Management Service) is an active equity and balanced manager.

In equities, the firm is a stock-picker; in fixed-income, it positions accounts to benefit from the yield curve and possible changes in interest rates.

The asset mix Jan. 1 was 82% stocks, 4% bonds and 14% cash.

The firm follows 1,000 stocks closely and 1,500, generally; all research is generated internally.

The parent is IDS Financial Corp., a subsidiary of American Express Co.

William Dudley is chief investment officer; Steve Scherbarth is client contact.

IDS Growth Spectrum Advisors

IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-1335

Total assets managed	$353,000,000
Total discretionary	$353,000,000
Total tax-exempt assets	$204,000,000
Total discretionary tax-exempt	$204,000,000
Tax-exempt clients	3
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	33

IDS Growth Spectrum Advisors, an active equity manager, focuses on emerging growth and core growth stock portfolios using a unique, top-down (growth trend analysis) and bottom-up (fundamental and valuation analysis) approach.

The asset mix Jan. 1 was 91% stocks and 9% cash.

The firm follows 100 stocks closely and 400, generally; 80% of the research is generated internally.

The parent is IDS Financial Corp., a subsidiary of American Express Co.

Gordon M. Fines is chief investment officer; Diane K. Vener is client contact.

IDS International Inc.

IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-1335

Total assets managed	$1,180,000,000
Total discretionary	$1,180,000,000
Total tax-exempt assets	$580,000,000
Total discretionary tax-exempt	$580,000,000
International equity assets	$496,000,000
International cash assets	$84,000,000
Tax-exempt clients	11
Types of accounts managed	CEG
Minimum separate account	$10,000,000
No. of portfolio managers	6
Size of research staff	2

IDS International Inc. is a semi-passive and active international/global equity manager.

The firm actively manages international/global stock portfolios using a top-down (macroeconomic, geopolitical overview) and bottom-up (stock selection) approach. They also manage semi-passive portfolios using an active top-down approach for country allocation combined with computer-optimized stock selections.

The asset mix Jan. 1 was 85% stocks and 15% cash.

The firm follows 100 stocks closely and 400, generally; 30% of the research is generated internally.

The parent is IDS Financial Corp., a subsidiary of American Express Co.

Peter L. Lamaison is chief investment officer; Diane K. Vener is client contact.

IDS Research Core & Aggressive Portfolios

IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-1335

Total assets managed	$27,000,000
Total discretionary	$27,000,000
Total tax-exempt assets	$20,000,000
Total discretionary tax-exempt	$20,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	33

IDS Research Core & Aggressive Portfolios, an active equity manager, uses cost effective, quantitative portfolio construction techniques to track the performance of the S&P 500. Incremental returns are achieved through stock selection.

The asset mix Jan. 1 was 99.7% stocks, 0.3% cash.

The firm follows 500 stocks closely and 500, generally; 80% of the research is generated internally.

The parent is IDS Financial Corp., a subsidiary of American Express Co.

Stuart A. Sedlacek is chief investment officer; Diane K. Vener is client contact.

IDS Trust

2880 Multifoods Tower, Minneapolis, Minn. 55402; (612) 372-3742

Total assets managed	$2,789,000,000
Total discretionary	$2,789,000,000
Total tax-exempt assets	$2,789,000,000
Total discretionary tax-exempt	$2,789,000,000
International equity assets	$3,000,000
401(k)/457 assets managed	$2,789,000,000
Tax-exempt clients	239
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	25
Size of research staff	33

IDS Trust is an active and passive equity, active fixed-income, balanced, active international equity, short-term and GIC manager.

GIC management is handled in-house by IDS Trust; all other categories are managed by other divisions on IDS Trust's behalf.

The asset mix Jan. 1 was 11% stocks, 4% bonds, 4% cash, 73% GICs and 8% other.

The firm follows 600 stocks closely and 2,000, generally; 75% of the research is generated internally.

The parent is IDS Financial Corp., a subsidiary of American Express Co.

Peter Anderson is chief investment officer; Ward Armstrong is client contact.

Income Research & Management Inc.

155 Federal St., Fourth Floor, Boston, Mass. 02110; (617) 350-7725

Total assets managed	$286,000,000
Total discretionary	$286,000,000
Total tax-exempt assets	$286,000,000
Total discretionary tax-exempt	$286,000,000
Dedicated/immunized assets	$16,000,000
Tax-exempt clients	8
Types of accounts managed	CG
Minimum separate account	$5,000,000
No. of portfolio managers	2

Income Research & Management Inc., an active fixed-income manager, manages portfolios in the less efficient sectors, primarily investment-grade corporate bonds. The firm seeks undervalued sectors and securities with special features that enable the creation of portfolios with superior risk/return profiles.

The asset mix Jan. 1 was 100% bonds.

John A. Sommers is chief investment officer; Robert G. Segee is client contact.

Independence Investment Associates Inc.

1 Liberty Square, Boston, Mass. 02109; (617) 292-8700

Total assets managed	$5,636,000,000
Total discretionary	$5,636,000,000
Total tax-exempt assets	$4,377,000,000
Total discretionary tax-exempt	$4,377,000,000
401(k)/457 assets managed	$42,000,000
Tax-exempt clients	61
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	9
Size of research staff	10

Independence Investment Associates Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is quantitative, using in-house, proprietary research to find stocks that combines cheapness and improving fundamentals. Portfolio construction is optimized.

Its fixed-income approach is to actively manage duration and spreads in investment-grade bonds to produce superior results. The process is disciplined and model driven.

The asset mix Jan. 1 was 71% stocks, 24% bonds and 5% cash.

The firm follows 400 stocks closely and 2,900, generally; 75% of the research is generated internally.

The parent is John Hancock Mutual Life Insurance Co.

William C. Fletcher is chief investment officer; Mark C. Lapman is client contact.

Independence One Capital Management Corp.

27777 Inkster Road, P.O. Box 9095, MC 10-19, Farmington Hills, Mich. 48333; (313) 473-3300

Total assets managed	$1,800,000,000
Total discretionary	$1,400,000,000
Total tax-exempt assets	$627,000,000
Total discretionary tax-exempt	$608,000,000
401(k)/457 assets managed	$210,000,000
Tax-exempt clients	239
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	9
Size of research staff	3

Independence One Capital Management Corp., formerly PRIMA Corp., is an active equity, active and passive fixed-income, balanced and short-term manager.

Its quantitative equity approach is value-oriented, using advanced computer analysis of price and expected earnings information for large-cap stocks and reducing risk without sacrificing return potential. Its long-term objective is to outperform the S&P 500 while maintaining a lower volatility.

Its fixed-income approach applies statistical modeling techniques to the yield curve on intermediate U.S. Treasuries. The objectives are to preserve capital and provide high long-term returns that outperform traditional buy-and-hold strategies while avoiding risk.

The asset mix Jan. 1 was 34% stocks and 66% bonds.

The firm follows 450 stocks closely and generally; all research is generated internally.

The parent is Michigan National Corp.

Josef Blass is chief investment officer; Barbara K. Baker is client contact.

Indiana Investment Advisors

One Indiana Square, Suite 101, Indianapolis, Ind. 46266; (317) 266-6198

Total assets managed	$3,150,000,000
Total discretionary	$2,950,000,000
Total tax-exempt assets	$2,060,000,000
Total discretionary tax-exempt	$1,991,000,000
Mortgage-backed assets	$358,000,000
401(k)/457 assets managed	$259,000,000
Tax-exempt clients	1,395
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	13
Size of research staff	19

Indiana Investment Advisors is an active and passive equity, active fixed-income, balanced, short-term, tactical asset allocation and GIC fund manager.

Its equity approach focuses on high-quality growth stocks that are experiencing above-average sales and earnings momentum. Current income is generally secondary.

Its fixed-income approach uses a combination of fundamental and quantitative strategies including credit analysis, relative value comparisons of sectors and maturity shifts dictated by an assessment of risk levels and interest rate trends.

The asset mix Jan. 1 was 11% stocks, 67% bonds, 4% cash and 18% mortgage-backed securities.

The firm follows 300 stocks closely and generally; all research is generated internally.

The parent is INB National Bank.

P. Roger Kumler is chief investment officer; Charles E. Pike is client contact.

Wm. A. Inskeep & Co.

12629 New Brittany Blvd., Fort Myers, Fla. 33907; (813) 939-5161

Total assets managed	$25,000,000
Total discretionary	$23,000,000
Total tax-exempt assets	$12,000,000
Total discretionary tax-exempt	$12,000,000
Tax-exempt clients	21
Types of accounts managed	CE
Minimum separate account	$300,000
No. of portfolio managers	1

Wm. A. Inskeep & Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses growth stocks and Graham & Dodd analysis. The approach is fundamental, seeking issues with strong long-term potential. Market timing is used.

Its fixed-income approach is risk-averse, using only high-quality, short- to intermediate-term issues.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

The firm follows 80 to 100 stocks closely and 250, generally; 20% of research is generated internally.

William A. Inskeep is chief investment officer and client contact.

Institutional Capital Corp.

303 W. Madison St., Suite 1800, Chicago, Ill. 60606; (312) 641-7200

Total assets managed	$1,307,000,000
Total discretionary	$1,307,000,000
Total tax-exempt assets	$1,307,000,000
Total discretionary tax-exempt	$1,307,000,000
401(k)/457 assets managed	$42,000,000
Tax-exempt clients	13
Types of accounts managed	CFJ
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	3

Institutional Capital Corp. is an active equity and balanced manager.

Its equity approach is opportunistic, emphasizing sector rotation and using primarily big-cap, highly liquid stocks. Both value and growth companies are sought. The fixed-income approach uses interest rate anticipation. Options are used.

The asset mix Jan. 1 was 78% stocks, 16% bonds and 5% cash.

The firm follows 150 stocks closely and 450, generally; 33% of research is generated internally.

William Maloney is chief investment officer; Russell C. Walter is client contact.

Institutional Portfolio Services Ltd.

1 First National Plaza, Suite 2594, Chicago, Ill. 60603; (312) 236-5388

Total assets managed	$90,000,000
Total discretionary	$90,000,000
Total tax-exempt assets	$70,000,000
Total discretionary tax-exempt	$70,000,000
Tax-exempt clients	10
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	2

Institutional Portfolio Services Ltd. is an active equity and balanced manager.

Its equity approach is top-down, giving prominent weight to monetary policy, interest rates and the stage of the economic cycle. Options are used.

Its fixed-income approach involves interest rate anticipation and the analysis of monetary aggregates, currency exchange rates and the stage of the economic cycle.

The asset mix Jan. 1 was 80% stocks and 20% bonds.

The firm follows 30 stocks closely and 50, generally; all research is generated internally.

B.P. Pai is chief investment officer; Denise M. Iwaniec is client contact.

INTECH

5 Concourse Parkway, Suite 3100, Atlanta, Ga. 30328; (404) 804-5851

Total assets managed	$497,000,000
Total discretionary	$497,000,000
Total tax-exempt assets	$431,000,000
Total discretionary tax-exempt	$431,000,000
Tax-exempt clients	5
Types of accounts managed	CJ
Minimum separate account	$50,000,000
No. of portfolio managers	1
Size of research staff	1

INTECH, an active equity manager, uses a quantitative/mathematical equity approach, utilizing a proprietary optimization model and rebalancing technology to manage broadly diversified low-risk portfolios relative to client-selected benchmarks.

The asset mix Jan. 1 was 99.5% stocks and 0.5% cash.

The firm follows 500 stocks generally; all research is generated internally.

The parent is The Prudential Insurance Co. of America.

E. Robert Fernholz is chief investment officer; Robert A. Garvy is client contact.

InterCash Capital Advisors

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1188

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Interfid Capital Corp.

1 Dag Hammarskjold Plaza, New York, N.Y. 10017; (212) 888-6808

Total assets managed	$81,000,000
Total discretionary	$81,000,000
Total tax-exempt assets	$74,000,000
Total discretionary tax-exempt	$74,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	5
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	2

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Size of research staff	2

Interlid Capital Corp. is an active equity, passive fixed-income and balanced manager.

Its equity approach is fundamental and quantitative, identifying currently undervalued stocks that will produce appreciation and improved income stream. Its fixed-income approach is passive, using interest rate anticipation.

The asset mix Jan. 1 was 30% equities, 60% bonds and 10% cash.

The firm follows 30 stocks closely and 60, generally; 60% of the research is generated internally.

Amos Kaminski is chief investment officer; H.H. Updike is client contact.

Interinvest Corp.

84 State St., 7th Floor, Boston, Mass. 02109; (617) 723-7870

Total assets managed	$110,000,000
Total discretionary	$110,000,000
Total tax-exempt assets	$59,000,000
Total discretionary tax-exempt	$59,000,000
International equity assets	$30,000,000
International fixed-income	$8,000,000
International cash assets	$3,000,000
Tax-exempt clients	33
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	4

Interinvest Corp. is a top-down, active global and international equity and fixed-income manager.

In equity accounts, managers determine market timing and country and sector allocations using macroeconomic analysis and geopolitical input. Graham & Dodd-type analysis is used in the stock selection process. The fixed-income approach is based on interest rate anticipation and cross-currency analysis.

The asset mix Jan. 1 was 85% stocks, 5% bonds and 10% cash.

The firm follows 300 stocks closely and 2,500, generally; 25% of the research is generated internally.

Hans P. Black is chief investment officer; Stanley T. Schmidt is client contact.

The International Trust Co.

P.O. Box 75, Royal Bank Plaza, Toronto, Ontario M5J 2J2; (416) 865-0515

Total assets managed	$115,000,000
Total discretionary	$75,000,000
Total tax-exempt	$115,000,000
Total discretionary tax-exempt	$75,000,000
For subsidiaries of U.S. firms	$50,000,000
Tax-exempt clients	35
U.S. subsidiaries	18
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	3

The International Trust Co., a Canadian firm, is a tactical asset allocation and short-term manager.

Its equity approach is value-oriented, using low p/e, sector rotation and market timing. Its fixed-income approach is based on interest rate anticipation, sector analysis and duration management.

The asset mix Jan. 1 was 36.5% Canadian stocks, 11.5% U.S. stocks, 44% bonds and 8% cash.

The parent is Starlan Holdings Ltd.

Mohammed Mamoodallah is chief investment officer; Jack Freeman is client contact.

Inverness Counsel Inc.

545 Madison Ave., New York, N.Y., 10022; (212) 980-5230

Total assets managed	$940,000,000
Total discretionary	$550,000,000
Total tax-exempt assets	$313,000,000
Total discretionary tax-exempt	$313,000,000
Tax-exempt clients	28
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	11

Inverness Counsel Inc. is an active equity, passive international/global equity, passive fixed-income and balanced manager.

Its equity approach uses qualitative, top-down economic analysis modified by quantitative price momentum/fundamental cross-plotted computer screens to develop its stock universe and industry weightings. Its fixed-income approach uses spaced maturities with selection focusing on the yield curve inflection point. It uses options.

The asset mix Jan. 1 was 30% stocks, 57% bonds and 13% cash.

The firm follows 100 stocks closely and 200, generally; 75% of the research is generated internally.

George H. Garfield is chief investment officer and client contact.

INVESCO MIM Inc.

1315 Peachtree St., Suite 500, Atlanta, Ga. 30309; (404) 892-0896

Total assets managed	$18,697,000,000
Total discretionary	$14,271,000,000
Total tax-exempt assets	$17,559,000,000
Discretionary tax-exempt	$13,424,000,000
401(k)/457 assets managed	$106,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	22

INVESCO MIM Inc. is an active equity and fixed-income, balanced, cash and tactical asset allocation manager.

Its equity approach is fundamental and bottom-up, placing primary emphasis on issue selection while de-emphasizing economic analysis and forecasting. The fixed-income approach actively ascertains the optimum duration through analysis of real yields, the yield curve and translating that duration into its corresponding maturity in a given interest rate environment.

The asset mix Jan. 1 was 73.9% stocks, 19.1% bonds and 7% cash.

The firm follows 150 stocks closely and 800, generally; 75% of research is generated internally.

The parent is INVESCO MIM PLC.

Wendell M. Starke is chief investment officer; Willis M. Everett is client contact.

INVESCO MIM International

Manhattan Tower, 25th Floor, 101 E. 52nd St., New York, N.Y. 10022; (212) 888-5820

Total assets managed	$619,000,000
Total discretionary	$619,000,000
Total tax-exempt assets	$319,000,000
Total discretionary tax-exempt	$319,000,000
International equity assets	$168,000,000
International fixed-income	$6,000,000
Tax-exempt clients	10
Types of accounts managed	CEG
Minimum separate account	$10,000,000
No. of portfolio managers	84

INVESCO MIM International is an active domestic and international equity, fixed-income and be-

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lanced; tactical asset allocation; and short-term manager.

Its equity approach uses sector rotation and low p/e stocks. In fixed income, it focuses on high-quality duration. Both approaches include the belief that common factors determine the level of markets worldwide, but security valuation systems differ. Options are used.

The asset mix Jan. 1 was 70.4% stocks, 10.9% bonds and 18.7% cash.

The firm generates 60% of its research internally.

The parent is INVESCO MIM PLC.

Donald Walker is chief investment officer; Frank J. Keeler is client contact.

Investment Advisers Inc.

1100 Dain Tower, Minneapolis, Minn., 55402; (612) 371-2939

Total assets managed	$8,100,000,000
Total discretionary	$8,100,000,000
Total tax-exempt assets	$7,100,000,000
Total discretionary tax-exempt	$7,100,000,000
401(k)/457 assets managed	$700,000,000
Tax-exempt clients	204
Types of accounts managed	CEFJ
Minimum separate account	$10,000,000
No. of portfolio managers	12
Size of research staff	4

Investment Advisers Inc. is an active equity, active and passive fixed-income, balanced, short-term, small-cap equity and limited duration bond manager.

Its theme-rotation equity approach concentrates on individual securities that will be growing faster than the general economy. Its fixed-income approach is cyclical. The credit cycle is considered the primary force shaping the business cycle.

The asset mix Jan. 1 was 37% stocks, 60% bonds and 3% cash.

The firm follows 150 stocks closely and 1,500, generally; 85% of the research is generated internally.

The parent is TSB Group PLC.

Noel Rahn is chief investment officer; I.P. "Kip" Kneiman is client contact.

Investment Advisors Inc.

1100 Louisiana, Suite 2600, Houston, Texas 77002; (713) 659-2611

Total assets managed	$702,000,000
Total discretionary	$702,000,000
Total tax-exempt assets	$510,000,000
Total discretionary tax-exempt	$510,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	60
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	7

Investment Advisors Inc. is an active equity, active fixed-income and balanced manager.

Its top-down equity approach combines sector rotation with an emphasis on growth stocks.

Its fixed-income approach uses interest rate anticipation, sector analysis and duration management based on yield curve and macroeconomic analysis.

The asset mix Jan. 1 was 52.1% stocks, 38.6% bonds and 9.3% cash.

Marvin H. McMurrey Jr. is chief investment officer; William L. Price is client contact.

The Investment Counsel Co.

56 E. Pine St., Suite 200, Orlando, Fla. 32801; (407) 841-6241

Total assets managed	$434,000,000
Total discretionary	$434,000,000
Total tax-exempt assets	$401,000,000
Total discretionary tax-exempt	$401,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	149
Types of accounts managed	CEFGJ
Minimum separate account	$100,000
No. of portfolio managers	4
Size of research staff	1

The Investment Counsel Co. is an active equity, active fixed-income and balanced manager.

Its equity approach is bottom up and value oriented, holding only companies it knows well and buying only at the price it wants.

Its fixed-income approach is based on interest rate anticipation, managing portfolios to provide stability through moderate maturity shifts and the use of high-quality issues. It uses fixed-income futures.

The asset mix Jan. 1 was 43% stocks, 46% bonds and 11% cash.

The firm follows 300 stocks closely and 50, generally; 65% of the research is generated internally.

Fred J. Shockley is chief investment officer; Greg Hopcraft is client contact.

Investment Counselors Inc.

1010 Market St., Suite 1540, St. Louis, Mo. 63101; (314) 421-3080

Total assets managed	$220,000,000
Total discretionary	$220,000,000
Total tax-exempt assets	$160,000,000
Total discretionary tax-exempt	$160,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	35
Types of accounts managed	CFGJ
Minimum separate account	$500,000
No. of portfolio managers	4

Investment Counselors Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on companies with increasing cash flows selling at a discount. Its fixed-income investments are in high-quality, intermediate securities with relatively current coupons. Average maturity is seven to 10 years.

The asset mix Jan. 1 was 70% stocks, 28% bonds and 2% cash.

Mark J. Deschaine is chief investment officer and client contact.

Investment Counselors of Maryland

803 Cathedral St., Baltimore, Md. 21201; (301) 539-3838

Total assets managed	$3,205,000,000
Total discretionary	$3,205,000,000
Total tax-exempt assets	$2,757,000,000
Total discretionary tax-exempt	$2,757,000,000
International equity assets	$33,000,000
Mortgage-backed assets	$501,000,000
Tax-exempt clients	112
Types of accounts managed	CEFG
Minimum separate account	$15,000,000
No. of portfolio managers	7
Size of research staff	3

Investment Counselors of Maryland is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes low p/e stocks and Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 40% stocks, 30% bonds, 11% cash and 19% mortgage-backed securities.

The firm follows 150 stocks closely and 6,000, generally; 65% of the research is generated internally.

The parent is United Asset Management.

Craig Lewis is chief investment officer; Robert B. Russell II is client contact.

Investment Research Co.

111 W. Jackson Blvd., Suite 1700, Chicago, Ill. 60604; (312) 930-3944

Total assets managed	$601,000,000
Total discretionary	$601,000,000
Total tax-exempt assets	$527,000,000
Total discretionary tax-exempt	$527,000,000
Tax-exempt clients	9
Types of accounts managed	CGJ
Minimum separate account	$30,000,000
No. of portfolio managers	2
Size of research staff	2

Investment Research Co., an active equity manager, takes a quantitative approach with the use of high-order non-linear analysis and p/e and dividend screens. Its style-optimized strategy is able to detect interactions and subtle patterns undetectable by mean/variance mathematics.

The asset mix Jan. 1 was 100% stocks.

The firm follows 500 stocks closely; all research is generated internally.

F.J. Gould is chief investment officer and client contact.

Investors Group Trust Co.

447 Portage Ave., Winnipeg, Manitoba R3C 3B6; (204) 943-0361

Total assets managed	$257,000,000
Total discretionary	$257,000,000
Total tax-exempt	$257,000,000
Total discretionary tax-exempt	$257,000,000
Equity real estate assets	$2,000,000
Mortgage assets	$112,000,000
Tax-exempt clients	1,974
Types of accounts managed	CEFG
Minimum separate account	$21,600,000
No. of portfolio managers	9

Investors Group Trust Co. Ltd., a Canadian firm, is an active equity, active fixed-income and short-term manager.

Its equity approach uses a conservative selection process, emphasizing value and liquidity. Its fixed-income approach uses a high-quality bond portfolio with a pooled mortgage fund.

The asset mix Jan. 1 was 15.5% Canadian stocks, 1.8% U.S. stocks, 30.1% bonds, 8.2% cash, 0.6% equity real estate and 43.8% mortgages.

It follows 63 stocks closely and 60 to 75, generally.

The parent is Investors Group Inc.

Richard E. Archer is chief investment officer; Janice L. Penner is client contact.

Investors Research Co.

1900 State St., Suite H, Santa Barbara, Calif. 93102; (805) 569-1078

Total assets managed	$90,000,000
Total discretionary	$90,000,000
Total tax-exempt assets	$5,000,000
Total discretionary tax-exempt	$5,000,000
Tax-exempt clients	39
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	2

Investors Research Co. is an active equity and balanced manager.

In equities, the firm uses growth stocks and tactical asset allocation. The approach emphasizes fundamental value with a technical bias. Its fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 40% stocks and 60% bonds.

The firm follows 100 stocks closely and 850, generally; all research is generated internally.

Edgar T. Wells is chief investment officer; Ralph D. Gibson Jr. is client contact.

Investors Research Corp.

2890 Golf Road, Suite 408, Rolling Meadows, Ill. 60008; (708) 640-1511

Total assets managed	$8,825,000,000
Total discretionary	$8,825,000,000
Total tax-exempt assets	$1,374,000,000
Total discretionary tax-exempt	$1,374,000,000
401(k)/457 assets managed	$1,500,000,000
Tax-exempt clients	55
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	0

Investors Research Corp., an active equity manager, emphasizes growth and emerging growth stock issues employing a bottom-up approach. It follows a rigid sell discipline and remains fully invested.

The asset mix Jan. 1 was 82% stocks, 7% bonds and 11% cash.

The firm follows 500 stocks closely and 7,000, generally; 95% of the research is generated internally.

The parent is Twentieth Century Cos.

James E. Stowers Jr., Dennis von Waaden, Robert Puff Jr., James E. Stowers III and Eric Fuchs are chief investment officers; Stephen M. Barney and John F. Rogers are client contacts.

Invista Capital Management

1500 Hub Tower, 699 Walnut, Des Moines, Iowa 50309; (515) 247-7424

See entry for THE PRINCIPAL FINANCIAL GROUP.

Ivory & Sime International

39 Main St., Chatham, N.J. 07928; (201) 635-6700

Total assets managed	$130,000,000
Total discretionary	$130,000,000
Total tax-exempt assets	$130,000,000
Total discretionary tax-exempt	$130,000,000
International equity assets	$120,000,000
International cash assets	$10,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$10,000,000
No.of portfolio managers	29

Ivory & Sime International Inc., an active domestic and international equity manager, emphasizes growth stocks, sector rotation and market timing, using long-term fundamentals in a research-based approach. Emphasis is on stock selection and identifying companies in a global context. Specialty products include small-cap and regional specialty portfolios in Europe and the Pacific Basin.

The asset mix Jan. 1 was 92% stocks and 8% cash.

The firm follows 150 stocks closely and 600, generally; 60% of the research is generated internally.

Michael T. Woodward is chief investment officer; Keith H. Wood is client contact.

J

Jacobs Levy Equity Management Inc.

280 Corporate Center, 3 ADP Blvd., Roseland, N.J. 07068; (201) 716-0066

Total assets managed	$102,000,000
Total discretionary	$102,000,000
Total tax-exempt assets	$94,000,000
Total discretionary tax-exempt	$94,000,000
Tax-exempt clients	3
Types of accounts managed	CG
Minimum separate account	$25,000,000
No. of portfolio managers	2
Size of research staff	2

Jacobs Levy Equity Management Inc., an active equity manager, takes a long/short market neutral equity approach using a quantitative, multidimensional model that exploits numerous market influences. Stock index futures are used.

All assets were in stocks Jan. 1.

The firm follows 3,000 stocks closely and generally; all research is generated internally.

Bruce I. Jacobs and Kenneth N. Levy are chief investment officers; Mr. Jacobs is client contact.

James Investment Research

P.O. Box 8, Alpha, Ohio 45301; (513) 426-7640

Total assets managed	$590,000,000
Total discretionary	$590,000,000
Total tax-exempt assets	$372,000,000
Total discretionary tax-exempt	$372,000,000
401(k)/457 assets managed	$40,000,000
Tax-exempt clients	52
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	7

James Investment Research Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses growth and low p/e stocks with sector rotation, market timing and quantitative approaches. It seeks neglected stocks with excellent fundamentals. For fixed income, only high-quality bonds are bought, with maturities based on interest rate forecasts.

The asset mix Jan. 1 was 45% stocks, 50% bonds and 5% cash.

The firm follows 4,000 stocks generally; all research is generated internally.

Frank James is chief investment officer; Diane M. Rose is client contact.

James River Capital Management Inc.

909 E. Main St., Suite 321, Richmond, Va. 23219; (804) 782-8725

Total assets managed	$51,000,000
Total discretionary	$46,000,000
Total tax-exempt assets	$31,000,000
Total discretionary tax-exempt	$31,000,000
International equity assets	$1,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	29
Types of accounts managed	CE
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	1

James River Capital Management Inc. is an active domestic and international equity, active fixed-income, balanced and short-term manager.

The firm chooses stocks for value, ability to sustain growth, earnings consistency, strong cash flow generating capacity, dividend growth and low p/e. Options are used.

The asset mix Jan. 1 was 60% stocks, 33% bonds and 7% cash.

The firm follows 30 stocks closely and 50, generally; 50% of the research is generated internally.

The parent is Scott & Stringfellow Financial Inc.

Frederic S. Bocock is chief investment officer; Bradley H. Gunter is client contact.

Jamison, Eaton & Wood Inc.

39 Main St., Chatham, N.J. 07928; (201) 635-6700

Total assets managed	$8,936,000,000
Total discretionary	$440,000,000
Total tax-exempt assets	$8,522,000,000
Total discretionary tax-exempt	$152,000,000
Tax-exempt clients	67
Types of accounts managed	CEFJ
Minimum separate account	$2,000,000
No.of portfolio managers	9

Jamison, Eaton & Wood Inc. is an active equity, active fixed-income and balanced manager.

In equities, both top-down asset mix decisions and bottom-up stock selection are employed. Sector rotation is pursued within these disciplines.

In fixed-income it applies risk reduction techniques to both the maturity and quality decisions, integrating top-down policy-making and bottom-up company analysis. Anticipated changes in interest rates and credit ratings are taken into account.

The asset mix Jan. 1 was 32% stocks, 58% bonds and 10% cash.

The firm follows 63 stocks closely and 160, generally; 60% of the research is generated internally.

The parent is Ivory & Sime PLC.

Keith H. Wood is chief investment officer; Ernest Cruikshank III is client contact.

Jarislowsky, Fraser & Co.

65 Queen St. W., Suite 1501, Toronto, Ontaria, M5H 2M5; (416) 363-7417

Total assets managed	$11,200,000,000
Total discretionary	$11,200,000,000
Total tax-exempt	$9,400,000,000
Total discretionary tax-exempt	$9,400,000,000
For subsidiaries of U.S. firms	$1,200,000,000
Non-North American equities	$100,000,000
Tax-exempt clients	255
U.S. subsidiaries	40
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	12

Jarislowsky, Fraser & Co., a Canadian firm, is an active equity, active fixed-income and balanced manager.

Its equity approach is based on fundamental research using Graham & Dodd analysis. Emphasis is placed on value analysis, financial strength and management competence.

Its fixed-income approach uses interest rate anticipation and sector analysis. It maximizes yield primarily by investing in quality corporate bonds. Three criteria are used — safety of principal, average term and yield optimization.

The asset mix Jan. 1 was 37% Canadian stocks, 11% U.S. stocks, 42% bonds and 10% cash.

It follows 175 stocks closely and 300, generally; 95% of research is generated internally.

Stephen Jarislowsky is chief investment officer; Joe Evershed is client contact.

Jennison Associates Capital

466 Lexington Ave., New York, N.Y. 10017; (212) 421-1000

Total assets managed	$19,398,000,000
Total discretionary	$19,398,000,000
Total tax-exempt assets	$19,398,000,000
Discretionary tax-exempt	$19,398,000,000
Fixed-income indexed assets	$4,155,000,000
Dedicated/immunized assets	$3,536,000,000
Mortgage-backed assets	$2,282,000,000
Types of accounts managed	CEFGJ
Minimum separate equity account	$20,000,000
Minimum separate bond account	$50,000,000
Minimum separate balanced	$10,000,000
No. of portfolio managers	8
Size of research staff	8

Jennison Associates Capital Corp. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach focuses on growth stocks, investing in those demonstrating superior absolute and relative earnings growth and that are attractively valued. In fixed income, the firm actively manages dedicated, immunized and benchmark portfolios of high-quality, long-term bonds selected through sector analysis and individual issue selection.

The asset mix Jan. 1 was 36% stocks, 48% bonds, 12% mortgage-backed securities and 4% balanced.

The firm follows 150 stocks closely and 250, generally; 75% of the research is generated internally.

The parent is The Prudential Insurance Co. of America.

Spiros Segalas is chief investment officer; John H. Hobbs is client contact.

Jenswold, King & Associates Inc.

5151 San Felipe, Suite 1450, Houston, Texas 77056; (713) 961-0462

Total assets managed	$386,000,000
Total discretionary	$386,000,000
Total tax-exempt assets	$206,000,000
Total discretionary tax-exempt	$206,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	68
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	5

Jenswold, King & Associates Inc. is an active equity and balanced manager.

Its equity approach is value-oriented. Purchase candidates generally sell at a sharp discount to private market value or at the lower end of their historical valuation range based on earnings, cash flow, book value or divided yield. Its fixed-income approach, offered only as part of a balanced account, uses interest rate anticipation.

The asset mix Jan. 1 was 87.4% stocks, 5% bonds and 7.6% cash.

The firm follows 100 stocks closely; 70% of the research is generated internally.

Roger E. King is chief investment officer and client contact.

JMB Institutional Realty

900 N. Michigan Ave., Chicago, Ill. 60611-1585; (312) 915-1900

Total assets managed	$10,659,000,000
Total discretionary	$10,242,000,000
Total tax-exempt assets	$10,146,000,000
Total discretionary tax-exempt	$9,729,000,000
Equity real estate assets	$9,729,000,000
Tax-exempt clients	267
Types of accounts managed	CEFG
Minimum separate account	$50,000,000
No. of portfolio managers	17
Size of research staff	24

JMB Institutional Realty Corp., a real estate manager, makes equity and equity-oriented investments in diversified portfolios of larger retail, office, industrial and apartment properties using complementary investment structures to optimize returns and emphasizing intensive property management to add value.

All assets were in equity real estate Jan. 1.

Jerome J. Claeys III is chief investment officer; Thomas S. Foster is client contact.

JMC Capital Management

2 Lakeway Center, Suite 1400, 3850 N. Causeway Blvd., Metairie, La. 70002; (504) 833-1111

Total assets managed	$395,000,000
Total discretionary	$395,000,000
Total tax-exempt assets	$357,000,000
Total discretionary tax-exempt	$357,000,000
Tax-exempt clients	155
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	1

JMC Capital Management Inc. is an active equity, active bond, balanced and short-term manager.

Its equity approach uses growth stocks, sector rotation and relative strength analysis. It is both top-down and bottom-up in approach. In fixed income, it is an active duration manager, focusing on one- to five-year government and investment-grade corporate issues. Special sectors such as asset-backed, CMOs, floating-rate and mortgage pass-through securities are used.

The asset mix Jan. 1 was 69% stocks, 15% bonds and 16% cash.

The firm follows 80 stocks closely; 60% of research is generated internally.

Franklin H. Jones Jr. is chief investment officer; Earl Johnson Jr. is client contact.

Johnson Investment Counsel Inc.

5556 Cheviot Road, Cincinnati, Ohio 45247; (513) 385-4001

Total assets managed	$792,000,000
Total discretionary	$792,000,000
Total tax-exempt assets	$529,000,000
Total discretionary tax-exempt	$529,000,000
International equity assets	$12,000,000
International fixed-income	$5,000,000
Mortgage-backed assets	$5,000,000
Tax-exempt clients	226
Types of accounts managed	CEFG
Minimum separate account	$250,000
No. of portfolio managers	7
Size of research staff	4

Johnson Investment Counsel Inc. is an active equity, active and passive fixed income, balanced and short-term manager.

Its equity approach uses Graham and Dodd analysis and growth stocks in a top-down approach with sector analysis. For fixed income, it uses sector analysis, making selections based on quality, duration and special situations. Convertible bonds are emphasized.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

The firm follows 100 stocks closely and 300, generally; 25% of the research is generated internally.

Timothy E. Johnson is chief investment officer; Scott F. Muhlhauser is client contact.

Jones Lang Wootton Realty Advisors

101 E. 52nd St., New York, N.Y. 10022; (212) 836-9501

Total assets managed	$3,000,000,000
Total discretionary	$1,000,000,000
Total tax-exempt assets	$1,500,000,000
Total discretionary tax-exempt	$1,000,000,000
Equity real estate assets	$1,000,000,000
Tax-exempt clients	4
Types of accounts managed	CG
Minimum separate account	$150,000,000
No. of portfolio managers	4
Size of research staff	6

Jones Lang Wootton Realty Advisors, a real estate manager, uses a core asset acquisition strategy with a heavy emphasis on internally generated economic/market research and a value creation asset management approach stressing internal property management/leasing capability.

All assets were in equity real estate Jan. 1.

John A. Weisz is client contact.

Jundt Associates Inc.

1550 Utica Ave. S., Suite 950, Minneapolis, Minn. 55416; (612) 541-0677

Total assets managed	$1,816,000,000
Total discretionary	$1,816,000,000
Total tax-exempt assets	$1,816,000,000
Total discretionary tax-exempt	$1,816,000,000
International equity assets	$140,000,000
International cash assets	$5,000,000
Tax-exempt clients	25
Types of accounts managed	CEFGU
Minimum separate account	$25,000,000
No. of portfolio managers	3

Jundt Associates Inc., an active growth-stock manager, follows a disciplined style for its emerging growth and core portfolios.

The asset mix Jan. 1 was 79% stocks, 1% convertible bonds and 20% cash.

The firm follows 50 to 75 stocks closely and 100 to 200, generally.

James R. Jundt is chief investment officer and client contact.

Jurika & Voyles Inc.

1999 Harrison St., Suite 700, Oakland, Calif. 94612; (415) 446-1991

Total assets managed	$218,000,000
Total discretionary	$213,000,000
Total tax-exempt assets	$90,000,000
Total discretionary tax-exempt	$85,000,000
Tax-exempt clients	64
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Jurika & Voyles Inc. is an active equity, active fixed-income, balanced, short-term and tactical asset allocation manager.

Its equity approach uses emerging growth and low p/e stocks. It seeks good businesses that are selling at a discount to the value of their ongoing operations and to the market average, where it perceives significant potential for earnings growth.

Fixed income is used in balanced accounts to generate stability and yield. The approach is based on interest rate anticipation, and emphasizes quality and liquidity. Only government obligations and some utilities are bought.

The asset mix Jan. 1 was 48% stocks, 35% bonds and 17% cash.

The firm follows 100 stocks closely; 30% of the research is generated internally.

William K. Jurika is chief investment officer; Karl O. Mills is client contact.

Justin Asset Management

4350 N. Fairfax Drive, Arlington, Va. 22203; (703) 276-8881

Total assets managed	$66,000,000
Total discretionary	$66,000,000
Total tax-exempt assets	$39,000,000
Total discretionary tax-exempt	$39,000,000
401(k)/457 assets managed	$13,000,000
Tax-exempt clients	29
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	1

Justin Asset Management is an active equity, active and passive fixed-income and balanced manager.

In equities, it buys stocks of companies with strong finances and high free-cash returns at discounts and holds until the value is realized.

Its fixed-income approach uses interest-rate anticipation, buying bonds of strongly financed entities with a tendency to remain short term.

The asset mix Jan. 1 was 45% stocks, 50% bonds and 5% cash.

The firm follows 60 to 80 stocks closely and 4,500, generally; 80% of the research is generated internally.

Benjamin Peress is chief investment officer; William Kapner is client contact.

Investment management consultants will be profiled in the Nov. 11 issue of *Pensions & Investments*.

K

Kahn Brothers & Co. Inc.

1 Exchange Plaza, New York, N.Y. 10006; (212) 269-7450

Total assets managed	$754,000,000
Total discretionary	$311,000,000
Total tax-exempt assets	$215,000,000
Total discretionary tax-exempt	$196,000,000
Tax-exempt clients	35
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	9

Kahn Brothers & Co. Inc. is an active equity, active bond, balanced and short-term manager.

Its equity approach employs fundamental Graham & Dodd analysis to identify investments with potential for value realization. In fixed income, it concentrates on higher-grade credits and frequently invests in less conventional instruments to improve yield without sacrificing credit quality.

The asset mix Jan. 1 was 35% stocks, 47% bonds and 18% cash.

The firm follows 50 stocks closely and 100, generally; 90% of research is generated internally.

Alan R. Kahn is chief investment officer; Thomas G. Kahn is client contact.

Daniel S. Kampel Associates

165 Broadway — 1 Liberty Plaza, New York, N.Y. 10006; (212) 346-6040

Total assets managed	$723,000,000
Total discretionary	$720,000,000
Total tax-exempt assets	$717,000,000
Total discretionary tax-exempt	$717,000,000
Tax-exempt clients	19
Types of accounts managed	CFJ
Minimum separate account	$5,000,000
No. of portfolio managers	3

Daniel S. Kampel Associates Inc. is an active and passive equity, active and passive fixed-income and balanced manager.

Its equity approach is value oriented, focusing on growth and emerging growth stocks and using sector rotation. For fixed income, it uses interest rate anticipation.

The asset mix Jan. 1 was 59% equities, 27% bonds and 14% cash.

The firm follows 70 stocks closely and 110, generally; 30% of the research is generated internally.

Daniel S. Kampel is chief investment officer; Theodore E. King Jr. is client contact.

Kanawha Capital Management Inc.

1301 N. Hamilton St., Suite 105, Richmond Va., 23230; (804) 359-3900

Total assets managed	$165,000,000
Total discretionary	$153,000,000
Total tax-exempt assets	$42,000,000
Total discretionary tax-exempt	$42,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	43
Types of accounts managed	CEFGJ
Minimum separate account	$250,000
No. of portfolio managers	4

Kanawha Capital Management Inc. is an active equity, active fixed-income and balanced manager.

The firm adds value through asset allocation and stock selection. Timing decisions are based on top-down assessment of valuation, fundamental and market psychology data. Stock selection is bottom up, based on analysis of p/e, earnings consistency, cash flow and ROI. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

The firm follows 50 stocks closely and 1,500, generally; 50% of research is generated internally.

Paul C. Munson is chief investment officer; Charles K. Fox is client contact.

Kankaku Scudder Capital Asset Management Corp.

345 Park Ave., New York, N.Y. 10154; (212) 326-6572

Total assets managed	$252,000,000
Total discretionary	$252,000,000
Total tax-exempt assets	$1,000,000
Total discretionary tax-exempt	$1,000,000
Tax-exempt clients	1
Types of accounts managed	F
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	2

Kankaku Scudder Capital Asset Management Corp. is an active domestic and international/global equity and fixed-income, balanced and short-term manager.

Its equity approach is value-oriented. Stock selection is based on a global perspective and fundamental research. Its fixed-income approach uses interest rate anticipation and sector analysis. Options and financial futures are used.

The asset mix Jan. 1 was 45% stocks and 55% bonds.

The firm follows 200 stocks closely and 1,000, generally; 70% of research is generated internally.

The parent is Kankaku Capital Management Co. Ltd.

Kenji Ishida is chief investment officer and client contact.

Kanne, Paris & Hoban Inc.

135 S. LaSalle St., Suite 1912, Chicago, Ill. 60603; (312) 372-2255

Total assets managed	$75,000,000
Total discretionary	$75,000,000
Total tax-exempt assets	$57,000,000
Total discretionary tax-exempt	$57,000,000
Tax-exempt clients	50
Types of accounts managed	CEG
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	2

Kanne, Paris & Hoban Inc., an active equity manager, takes a conservative and risk-averse investment approach. It invests in companies with large market capitalization and strong profit performance overlooked by the market. Using the same value-oriented approach, the firm manages a specialized health/pharmaceutical portfolio.

The asset mix Jan. 1 was 85% equities and 15% cash.

The firm follows 500 stocks closely and 6,000, generally; all research is generated internally.

Jeffrey E. Kanne is chief investment officer; Cathy A. Burnett is client contact.

Karpus Investment Management

5 Tobey Village Office Park, Pittsford, N.Y. 14534; (716) 586-4680

Total assets managed	$86,000,000
Total discretionary	$86,000,000
Total tax-exempt assets	$13,000,000
Total discretionary tax-exempt	$13,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	24
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	4

Karpus Investment Management is an active domestic and international/global bond and short-term manager.

Its approach uses interest rate anticipation and sector analysis, riding the yield curve. It invests in closed-end funds at a discount to the net asset value, and uses barbelling and duration analysis.

The asset mix Jan. 1 was 65% bonds, 15% cash and 20% in closed-end bond funds.

George W. Karpus is chief investment officer; Sharon L. Thornton is client contact.

Karsten Realty Advisors

12121 Wilshire Blvd., Suite 900, Los Angeles, Calif. 90025; (213) 826-0035

Total assets managed	$1,060,000,000
Total discretionary	$1,060,000,000
Total tax-exempt assets	$924,000,000
Total discretionary tax-exempt	$924,000,000
Equity real estate assets	$653,000,000
Mortgage assets	$271,000,000
Tax-exempt clients	28
Types of accounts managed	CG
Minimum separate account	$1,000,000
Size of research staff	3

Karsten Realty Advisors, a real estate investment manager with a strong emphasis on research, focuses on equity ownership and equity-oriented mortgages for its separate account clients. It also manages closed-end commingled funds. It has developed an expertise in special management opportunities, including individual properties, both equity and debt, and portfolios of properties requiring special attention.

The asset mix Jan. 1 was 71% equity real estate and 29% mortgages.

Robert A. Feren is chief investment officer; Mr. Feren, A. Redmond Doms Jr. and John M. Lundsten are client contacts.

KAS Investment Consultants

13005 SE 46th, Bellevue, Wash. 98006; (206) 641-7645

Total assets managed	$8,000,000
Total discretionary	$8,000,000
Total tax-exempt assets	$4,000,000
Total discretionary tax-exempt	$4,000,000
Tax-exempt clients	8
Types of accounts managed	C
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	1

KAS Investment Consultants is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on both stocks with strong fundamental values and on earnings growth stocks. Low p/e stocks, market timing and Graham & Dodd analysis are employed. Its fixed-income approach is driven by interest rate anticipation. Credit conditions, economic forecasts and markets are reviewed.

The firm follows 100 stocks closely.

R.J. Wells-Henderson is chief investment officer; Richard L. Wilkins is client contact.

Keeley Asset Management

401 S. LaSalle St., Chicago, Ill. 60605; (312) 786-5000

Total assets managed	$24,000,000
Total discretionary	$24,000,000
Total tax-exempt assets	$13,000,000
Total discretionary tax-exempt	$13,000,000
Tax-exempt clients	9
Types of accounts managed	C
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

Keeley Asset Management Corp., an active equity manager, offers three strategies.

It purchases securities of companies involved in corporate reorganization or spinoffs, emphasizing those selling below book value or expected to be purchased for cash; securities deemed special situations with a market timing overview; and high-yield securities, writing options against the stock.

John L. Keeley Jr. is chief investment officer and client contact.

Kemper Asset Management

120 S. LaSalle St., Chicago, Ill. 60603; (312) 781-6871

Total assets managed	$3,054,000,000
Total discretionary	$3,054,000,000
Total tax-exempt assets	$2,599,000,000
Total discretionary tax-exempt	$2,599,000,000
Tax-exempt clients	43
Types of accounts managed	CEFGJ
Minimum separate equity account	$10,000,000
Minimum separate balanced	$15,000,000
Minimum separate bond account	$20,000,000
No. of portfolio managers	21
Size of research staff	34

Kemper Asset Management is an active equity, active fixed-income, balanced, active international/global bond and short-term manager.

Its equity approach is fundamental, stressing growth at an attractive price. Stocks are selected possessing superior earnings potential at valuations that underestimate the growth.

Its fixed-income approach emphasizes active movement among different sectors and issues within a controlled framework of plus or minus 25% of duration of the Shearson Lehman Brothers Government/Corporate Index.

The asset mix Jan. 1 was 34% stocks, 61% bonds and 5% cash.

The firm follows 200 stocks closely and 500, generally; 80% of equity research and 90% of fixed-income research are generated internally.

The parent is Kemper Corp.

Geoffrey P. Lutz and James S. Cusick are client contacts.

Kemper Financial Services

120 S. LaSalle St., Chicago, Ill. 60603; (312) 781-6871

Total assets managed	$63,446,000,000
Total discretionary	$63,446,000,000
Total tax-exempt assets	$6,598,000,000
Total discretionary tax-exempt	$6,598,000,000
Mortgage assets	$251,000,000
401(k)/457 assets managed	$375,000,000
Tax-exempt clients	43
Types of accounts managed	CEFGJ
No. of portfolio managers	21
Size of research staff	34

Kemper Financial Services Inc. is an active domestic and international equity and fixed-income, balanced, short-term and 401(k)/457 manager.

Its equity approach seeks growth stocks at attractive prices. Kemper uses a fundamental approach, selecting stocks possessing superior potential at valuations that underestimate that growth.

Its fixed-income approach uses intermediate maturity/sector allocation, emphasizing active movement among sectors and issues within the controlled framework of plus-or-minus 25% of duration of the Shearson Lehman Government/Corporate Index.

The asset mix Jan. 1 was 10.6% stocks, 85.2% bonds, 0.4% equity real estate and 3.8% cash.

The firm follows 200 stocks closely and 500, generally; 80% of the equity research and 90% of the fixed-income research is generated internally.

The parent is Kemper Corp.

Stephen B. Timbers is chief investment officer; John E. Peters is client contact.

Kempner Capital Management Inc.

P.O. Box 119, Galveston, Texas 77553; (409) 765-6671

Total assets managed	$507,000,000
Total discretionary	$177,000,000
Total tax-exempt assets	$235,000,000
Total discretionary tax-exempt	$136,000,000
401(k)/457 assets managed	$7,000,000
Tax-exempt clients	11
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	2

Kempner Capital Management Inc. is an active equity, passive bond and balanced manager.

Its equity approach emphasizes Graham & Dodd analysis and low p/e stocks with limited downside risk. Options are used. In fixed income, it buys high-quality, full faith-and-credit governments.

The asset mix Jan. 1 was 80% stocks, 10% bonds and 10% cash.

The firm follows 100 stocks closely and 300, generally; 20% of research is generated internally.

Harris L. Kempner Jr. is chief investment officer; Donna Gindrup is client contact.

Kennedy Associates Inc.

2400 Financial Center Building, Seattle, Wash. 98161; (206) 624-9640

Total assets managed	$3,000,000,000
Total discretionary	$3,000,000,000
Total tax-exempt assets	$3,000,000,000
Total discretionary tax-exempt	$3,000,000,000
Equity real estate assets	$994,000,000
Tax-exempt clients	39
Types of accounts managed	EFGJ
Minimum separate account	$25,000,000
No. of portfolio managers	2
Size of research staff	4

Kennedy Associates Inc. is an active fixed-income, balanced and real estate manager.

Its primary equity approach concentrates on stocks selling at a sufficient discount to capitalization of future earnings stream to provide a total rate of return potential exceeding that of competing financial instruments.

Its primary fixed-income approach focuses on interest rate anticipation and sector rotation using a business cycle approach. Interest rate sensitivity and duration convexity are actively managed via portfolio structure and security selection.

Its real estate approach focuses on equity ownership of commercial structures in prime locations providing competitive current returns and long-term appreciation potential.

The asset mix Jan. 1 was 8% stocks, 52% fixed income, 35% equity real estate and 5% GICs.

The parent is Babcock-Prebon PLC.

Duff Kennedy is chief investment officer; Ronald D. Roberts is client contact.

The Kenwood Group Inc.

77 W. Washington, Suite 1615, Chicago, Ill. 60602; (312) 368-1666

Total assets managed	$11,000,000
Total discretionary	$11,000,000
Total tax-exempt assets	$11,000,000
Total discretionary tax-exempt	$11,000,000
Tax-exempt clients	3
Types of accounts managed	CG
Minimum separate account	$100,000
No. of portfolio managers	2

The Kenwood Group Inc., an active equity manager, uses a value-oriented approach, focusing on stocks with minimum downside risk in the medium-capitalization range. Quantitative tools are used, but with a fundamental, management-intensive approach.

The asset mix Jan. 1 was 65% stocks and 35% cash.

Barbara L. Bowles is chief investment officer and client contact.

Kidder Peabody Asset Management Inc.

20 Exchange Place, 7th Floor, New York, N.Y. 10005; (212) 510-8910

Total assets managed	$6,870,000,000
Total discretionary	$6,870,000,000
Total tax-exempt assets	$480,000,000
Total discretionary tax-exempt	$480,000,000
International fixed-income	$25,000,000
International cash assets	$111,000,000
401(k)/457 assets managed	$18,000,000
Tax-exempt clients	53
Types of accounts managed	CEFJ
Minimum separate account	$5,000,000
No. of portfolio managers	13
Size of research staff	35

Kidder Peabody Asset Management Inc. is an active domestic and international equity and fixed-income, balanced and short-term manager.

The firm focuses on fundamental characteristics, especially demonstrated and projected earnings capability. This style is complemented with overall investment themes that target longer-term trends that may cross traditional industries and sector groupings. Fundamental fixed-income focuses on shifting of maturities based on interest rate forecasting. High-quality and liquidity are emphasized.

The firm runs $10 million in options overwriting programs; all of the underlying assets are managed internally.

The asset mix Jan. 1 was 68% stocks, 24% bonds and 8% cash.

The firm follows between 250 and 300 stocks closely and 600, generally; 50% of the research is generated internally.

The parent is Kidder, Peabody & Co. Inc.

Stephan D. Abrams is chief investment officer; Diane E. Jaffee and Morrison C. Huston are client contacts.

Luther King Capital Management

301 Commerce, Suite 1600, Fort Worth, Texas 76102; (817) 332-3235

Total assets managed	$4,121,000,000
Total discretionary	$4,121,000,000
Total tax-exempt assets	$3,113,000,000
Total discretionary tax-exempt	$3,113,000,000
Tax-exempt clients	135
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	5

Luther King Capital Management is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach emphasizes growth stocks and low p/e. It focuses on companies with sustainably high return on equity, assuming the prudent use of leverage and companies with substantially undervalued assets and excess cash flow. Its fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 66.2% stocks, 19.6% bonds and 14.2% cash.

The firm follows 150 stocks closely and 400, generally; 60% of the research is generated internally.

Kirr, Marbach & Co.

621 Washington St., Columbus, Ind. 47201; (812) 376-9464

Total assets managed	$427,000,000
Total discretionary	$427,000,000
Total tax-exempt assets	$337,000,000
Total discretionary tax-exempt	$337,000,000
Tax-exempt clients	100

Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	1

Kirr, Marbach & Co. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes Graham & Dodd analysis.

The asset mix Jan. 1 was 40.4% stocks, 21.4% bonds and 38.2% cash.

Gregg T. Summerville is chief investment officer; David M. Kirr is client contact.

Kleinwort Benson International Investment

200 Park Ave., New York, N.Y. 10166; (212) 351-5800

Total assets managed	$511,000,000
Total discretionary	$511,000,000
Total tax-exempt assets	$286,000,000
Total discretionary tax-exempt	$286,000,000
International equity assets	$272,000,000
International fixed-income	$300,000
Tax-exempt clients	5
Types of accounts managed	CFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	9
Size of research staff	75

Kleinwort Benson International Investment Ltd. is an active international/global equity and fixed-income manager.

Its equity approach is based on the selection of companies with above-average earnings growth, taking into account the role of the markets.

Its fixed-income approach maximizes the total return on assets within client risk parameters by using a top-down approach that focuses on quality and adding value through research, fund management and dealing expertise.

The asset mix Jan. 1 was 94.9% stocks, 0.1% fixed-income and 5% cash.

The firm follows 400 stocks closely and 3,000, generally; 70% of the research is generated internally.

John F.H. Trott is chief investment officer; Simon G. Fenton is client contact.

Knight, Bain, Seath & Holbrook Capital Management Inc.

1 Toronto St., Suite 708, Toronto, Ontario M5C 2V6; (416) 863-1433

Total assets managed	$2,851,000,000
Total discretionary	$2,851,000,000
Total tax-exempt	$2,851,000,000
Total discretionary tax-exempt	$2,851,000,000
For subsidiaries of U.S. firms	$518,000,000
Tax-exempt clients	68
U.S. subsidiaries	1
Types of accounts managed	CEFGU
No. of portfolio managers	6
Size of research staff	2

Knight, Bain, Seath & Holbrook Capital Management Inc., a Canadian firm, is an active equity, active fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis to identify growth and low p/e stocks. Its fixed-income approach uses interest rate anticipation.

D. Knight, H. Seath, R. Holbrook, P. Pennal and M. Waring are chief investment officers; Mr. Seath is client contact.

Koll Realty Advisors

4343 Von Karman Ave., Newport Beach, Calif. 92660; (714) 833-3030

Total assets managed	$4,500,000,000
Total discretionary	$1,610,000,000
Total tax-exempt assets	$1,610,000,000
Total discretionary tax-exempt	$1,610,000,000
Equity real estate assets	$1,610,000,000
Tax-exempt clients	8
Types of accounts managed	CG
Minimum separate account	$25,000,000
No. of portfolio managers	5
Size of research staff	2

Koll Realty Advisors, a real estate manager, provides acquisition, asset management, property management and disposition services for industrial, office and retail properties. Special focus is on workout situations. Performance is maximized through a hands-on management philosophy.

All assets were in equity real estate Jan. 1.

The parent is The Koll Co.

Ed Griffin is chief investment officer; Jeannette Poe is client contact.

KR Capital Advisors Inc.

450 Park Ave., New York, N.Y. 10022; (212) 888-6300

Total assets managed	$748,000,000
Total discretionary	$748,000,000
Total tax-exempt assets	$718,000,000
Total discretionary tax-exempt	$718,000,000
401(k)/457 assets managed	$62,000,000
Tax-exempt clients	17
Types of accounts managed	CFG
Minimum separate account	$10,000,000
No. of portfolio managers	2

KR Capital Advisors Inc., an active equity manager, has a bias toward Graham & Dodd, but takes a more opportunistic approach analyzed from a corporate finance or entrepreneurial perspective.

The asset mix Jan. 1 was 80% stocks, 1.2% bonds and 18.8% cash.

The firm follows 100 stocks closely and 300, generally; 80% of research is generated internally.

Edward D. Klein is client contact.

Kunath Karren Rinne & Atkin

4000 Key Tower, 1000 Second Ave., Seattle, Wash. 98104; (206) 621-7400

Total assets managed	$174,000,000
Total discretionary	$174,000,000
Total tax-exempt assets	$55,000,000
Total discretionary tax-exempt	$55,000,000
Mortgage-backed assets	$2,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	22
Types of accounts managed	CF
Minimum separate account	$1,000,000
No. of portfolio managers	4

Kunath Karren Rinne & Atkin Inc. is an active equity and fixed-income, balanced and short-term manager.

Stocks are managed on a rotational basis, emphasizing earnings-driven or value-driven stocks dependent upon market trends as identified by both internal and external research.

Its fixed-income approach uses interest rate anticipation and sector analysis, and is designed to provide consistent returns by using securities with five-year maximum maturities.

Options and stock-index futures are used.

The asset mix Jan. 1 was 12% stocks, 64.5% bonds, 21.5% cash and 2% mortgage-backed securities.

The firm follows 85 stocks closely and 150, generally; 60% of research is generated internally.

Jeffrey Atkin is chief investment officer; Bruce E. Rinne is client contact.

L

Laidlaw Holdings Asset Management Inc.

275 Madison Ave., New York, N.Y. 10016; (212) 949-5400

Total assets managed	$220,000,000
Total discretionary	$200,000,000
Total tax-exempt assets	$18,000,000
Total discretionary tax-exempt	$11,000,000
International equity assets	$2,000,000
International fixed-income	$1,000,000
401(k)/457 assets managed	$15,000,000
Types of accounts managed	CFJ
Minimum separate account	$250,000
No. of portfolio managers	8
Size of research staff	4

Laidlaw Holdings Asset Management Inc. is an active domestic and international equity and fixed-income, balanced, short-term and tactical asset allocation manager.

Its equity approach uses top-down and bottom-up analysis with asset allocation as the framework for investments according to the economic cycle. Its fixed-income approach analyzes international markets to provide a relative valuation for U.S. instruments. Then federal policy and money supply are monitored for tactical advantage.

The asset mix Jan. 1 was 35% stocks, 60% bonds and 5% cash.

The parent is Laidlaw Holdings Inc.

Anthony Bune is chief investment officer and client contact.

Laketon Investment Management

P.O. Box 31, Suite 2200, Royal Bank Plaza, North Tower, Toronto, Ontario M5J 2J1; (416) 868-1380

Total assets managed	$900,000,000
Total discretionary	$900,000,000
Total tax-exempt	$750,000,000
Total discretionary tax-exempt	$154,000,000
For subsidiaries of U.S. firms	$154,000,000
Tax-exempt clients	30
U.S. subsidiaries	1
Types of accounts managed	CEGU
Minimum separate account	$5,000,000
No. of portfolio managers	5

Laketon Investment Management, a Canadian firm, is an active equity, active fixed-income and balanced manager.

Its equity approach is to invest 50% in the current business cycle sector, 20% in Graham & Dodd sector and 25% to 30% in special situations with superior managers. Its fixed-income approach is a classic "barbell" strategy. Relative to other active managers, the firm emphasizes the longer term both as to trend analysis and average holding period. The firm trades around the basic maturity strategy to add value with little incremental risk by means of relative value swaps.

The asset mix Jan. 1 was 36% Canadian stocks, 9% U.S. stocks, 43% bonds and 12% cash.

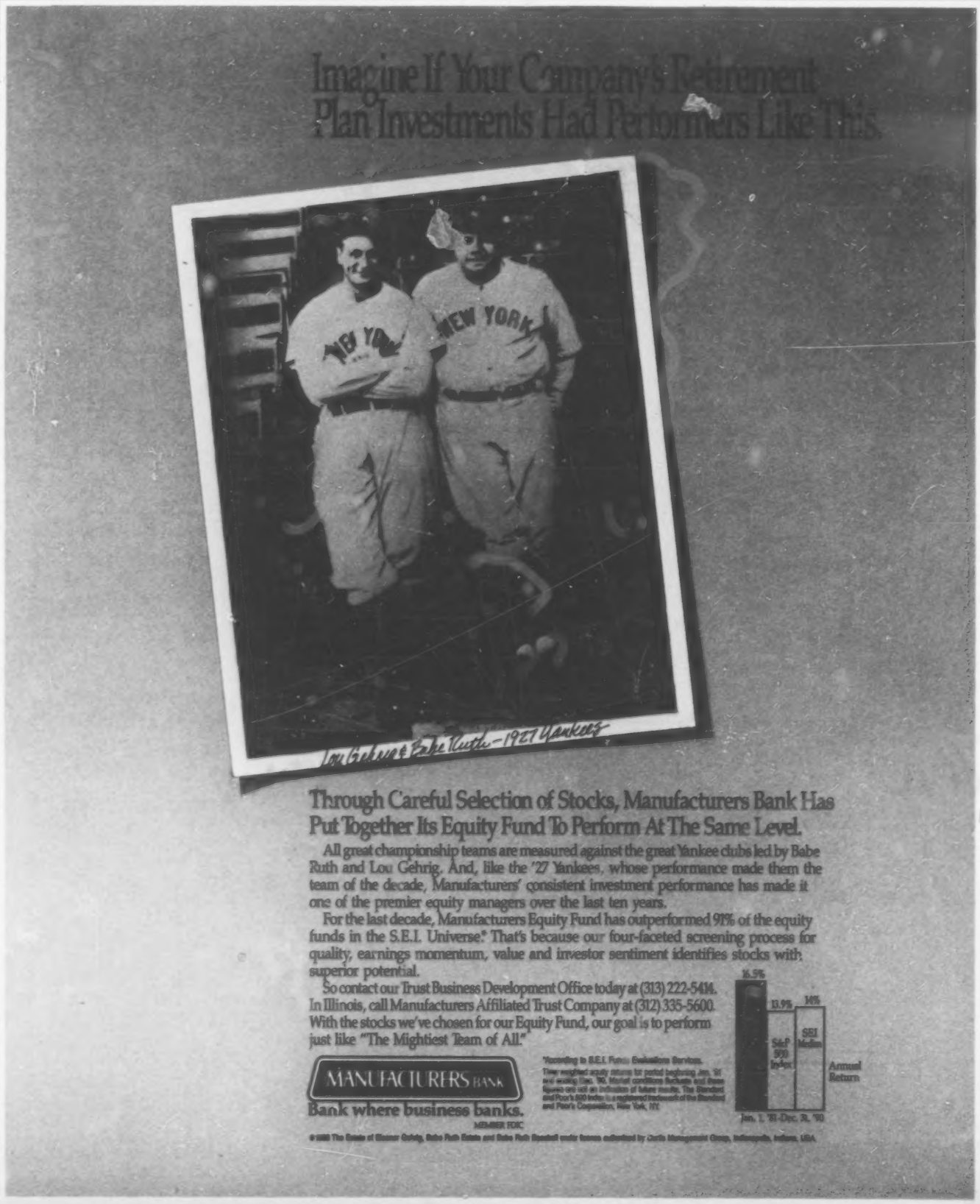
It follows 80 stocks closely and 200, generally; 48% of research is generated internally.

Alden S. White is chief investment officer; Emily J. Black is client contact.

Alan B. Lancz & Associates

3930 Sunforest Court, Toledo, Ohio, 43623; (419) 474-6733

Total assets managed	$10,000,000



Total discretionary	$10,000,000
Total tax-exempt assets	$6,000,000
Total discretionary tax-exempt	$6,000,000
401(k)/457 assets managed	$250,000
Tax-exempt clients	20
Types of accounts managed	CEFJ
Minimum separate account	$150,000
No. of portfolio managers	1
Size of research staff	3

Alan B. Lancz & Associates Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses growth, emerging growth and low p/e stocks with Graham & Dodd analysis and market timing. Special situations also are used, emphasizing quality of management.

In fixed income, it uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 80% stocks, 10% bonds and 10% cash.

Alan B. Lancz is chief investment officer; Jody Stoner is client contact.

LaSalle Advisors Ltd.

11 S. LaSalle St., Chicago, Ill. 60603; (312) 782-5800

Total assets managed	$4,200,000,000
Total discretionary	$4,200,000,000
Total tax-exempt assets	$4,200,000,000
Total discretionary tax-exempt	$4,200,000,000
Equity real estate assets	$4,200,000,000
Tax-exempt clients	111
Types of accounts managed	CFG
Minimum separate account	$100,000,000
No. of portfolio managers	8
Size of research staff	6

LaSalle Advisors Ltd., a real estate manager, makes equity purchases of larger, high-quality office buildings, shopping centers and industrial parks with the objective of producing superior returns through aggressive management with its own professional on-site management.

All assets were in equity real estate Jan. 1.

The parent is LaSalle Partners Ltd.

Kenneth M. Campia is chief investment officer; Christopher J. Burke, Hugh E. Reams Jr., William N. Thompson, Brooke Brady, Markus Trice and Greg Hausler are client contacts.

LaSalle National Trust N.A.

135 S. LaSalle St., Chicago, Ill. 60603; (312) 443-2300

Total assets managed	$9,672,000,000
Total discretionary assets	$2,760,000,000
Total tax-exempt assets	$2,180,000,000
Total discretionary tax-exempt	$1,974,000,000
Mortgage assets	$87,000,000
401(k)/457 plan assets	$355,000,000
Tax-exempt clients	441
Types of accounts managed	CFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	17
Size of research staff	6

LaSalle National Trust N.A., formerly LaSalle National Bank, is an active equity and fixed-income, balanced and short-term manager.

Its equity approach offers a family of quantitatively driven investment products, including core, value and small-cap styles. Its fixed-income approach establishes a benchmark with clients, then constructs a portfolio with a yield advantage and positive convexity. Duration is managed based on interest rate forecasts.

The parent is Algemene Bank Nederland N.V.

James F. Sullivan is chief investment officer; Robert D. Meiresonne is client contact.

The data above include statistics for LaSalle Street Capital Management Ltd., formerly Chemical Investment Group-Chicago.

LaSalle Street is an active equity and fixed-income and balanced manager with $550 million in discretionary tax-exempt assets.

Its diversified growth equity style concentrates on earnings momentum with value examination. Its real income growth approach emphasizes an income orientation based on a growing stream of dividends.

Jan B. Persson is chief investment officer; Marisa C. Newman is client contact.

LaSalle Street Capital Management Ltd.

10 S. LaSalle St., Suite 3701, Chicago, Ill. 60603; (312) 220-7550

See entry for LASALLE NATIONAL TRUST

Latimer & Buck Real Estate Advisors

121 S. Broad St., Suite 1300, Philadelphia, Pa. 19001; (215) 985-3922

Total assets managed	$1,437,000,000
Total discretionary	$1,437,000,000
Total tax-exempt assets	$1,437,000,000
Total discretionary tax-exempt	$1,437,000,000
Equity real estate assets	$324,000,000
Mortgage assets	$1,113,000,000
Tax-exempt clients	2
Types of accounts managed	G
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	1

Latimer & Buck Real Estate Advisors, an equity real estate and mortgage manager, concentrates on equity-oriented investments in income-producing property using participating and convertible mortgages, joint venture and equity structures.

The asset mix Jan. 1 was 77.5% mortgages and 22.5% equity real estate.

The parent is Legg Mason Inc.

Douglas S. Callentine is chief investment officer; Andy Sheffler is client contact.

Laurentian Investment Management (Canada) Inc.

330 Front St. W., Third Floor, Toronto, Ontario M5V 3B7; (416) 343-5355

Total assets managed	$2,000,000,000
Total discretionary	$1,700,000,000
Total tax-exempt	$400,000,000
Total discretionary tax-exempt	$400,000,000
For subsidiaries of U.S. firms	$50,000,000
Non-North American equities	$50,000,000
Tax-exempt clients	100
U.S. subsidiaries	20
Types of accounts managed	CU
Minimum separate account	$4,000,000
No. of portfolio managers	7
Size of research staff	1

Laurentian Investment Management (Canada) Inc., a Canadian firm, is an active domestic and international equity and fixed-income, passive domestic equity, short-term, tactical asset allocation and balanced manager.

Its equity approach emphasizes a top-down/fundamentalist style, seeking value and using sector rotation. Its fixed-income approach is top-down, based on fundamental analysis leading to an interest rate forecast. Managers use sector spread trades and trade against yield curve anomalies.

The asset mix Jan. 1 was 35% Canadian stocks, 7% U.S. stocks, 45% bonds, 10% cash and 3% foreign.

Selwyn J. Kletz is chief investment officer; Donald D. Landreville is client contact.

C.J. Lawrence Inc.

1290 Avenue of the Americas, New York, N.Y. 10104; (212) 468-5000

Total assets managed	$800,000,000
Total discretionary	$800,000,000
Total tax-exempt assets	$88,000,000
Total discretionary tax-exempt	$88,000,000
401(k)/457 assets managed	$6,000,000
Tax-exempt clients	18
Types of accounts managed	CEFJ
Minimum separate account	$200,000
No. of portfolio managers	6
Size of research staff	25

C.J. Lawrence Inc. is an active equity, active bond and balanced manager.

Its equity approach uses tactical asset allocation and emphasizes low p/e. Asset allocation is based upon the CJL Market Monitor and fundamental research. Stocks are selected through relative valuation screens. Its fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash.

The firm follows 200 stocks closely and 600, generally; 75% of the research is generated internally.

The parent is Morgan Grenfell Holdings.

James E. Moltz is chief investment officer; Bruce W. Benedict is client contact.

Lazard Freres Asset Management

1 Rockefeller Plaza, New York, N.Y. 10020; (800) 228-0203

Total assets managed	$14,312,000,000
Total discretionary	$14,312,000,000
Total tax-exempt assets	$12,497,000,000
Discretionary tax-exempt	$12,497,000,000
International equity assets	$1,100,000,000
Dedicated/immunized assets	$400,000,000
Mortgage-backed assets	$610,000,000
401(k)/457 assets managed	$82,000,000
Tax-exempt clients	243
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	21
Size of research staff	7

Lazard Freres Asset Management is an active domestic and international equity, active fixed-income and balanced manager.

In equities, the firm uses proprietary research to discover and validate stocks where it received more (high return on equity and assets) than it paid for (price/book value). Its fixed-income approach is value-oriented. Accounts are managed on a total return basis; qualitative and quantitative valuation techniques are used to determine the maturity mix, sector, quality and individual securities of portfolios.

The asset mix Jan. 1 was 66% stocks, 21% bonds, 8% cash and 5% mortgage-backed securities.

The firm follows 100 to 150 stocks closely and 300, generally; 85% of the research is generated internally.

Herbert Gullquist is chief investment officer; Anthony J. Dote and Mark W. Hamilton are client contacts.

WR Lazard & Co.

14 Wall St., 18th Floor, New York, N.Y. 10005; (212) 406-2700

Total assets managed	$1,854,000,000
Total discretionary	$1,854,000,000
Total tax-exempt assets	$1,850,000,000
Total discretionary tax-exempt	$1,850,000,000
Fixed-income indexed assets	$730,000,000
Tax-exempt clients	39
Types of accounts managed	CEPGJ
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	4

WR Lazard & Co. is an active equity, active and passive fixed-income, balanced and short-term manager.

The firm's investment strategy is based on quantitative and qualitative analysis, followed by risk assessment.

The asset mix Jan. 1 was 12% stocks, 87% bonds and 1% cash.

The firm follows 125 stocks closely and 5,000, generally; 20% of research is generated internally.

Wardell R. Lazard is chief investment officer; Robert I. Spruill is client contact.

R.M. Leary & Co. Inc.

3300 E. First Ave., Suite 380, Denver, Colo. 80206; (303) 320-1063

Total assets managed	$30,000,000
Total discretionary tax-exempt	$22,000,000
Tax-exempt clients	120
Types of accounts managed	CEFJ
Minimum separate account	$100,000
Size of research staff	2

R.M. Leary & Co. Inc., a balanced manager, uses market timing in an aggressive common stock fund during rising markets and defensive positions in a bond or money market fund during declining markets. In fixed income, interest rate anticipation is used. Bearish markets dictate a defensive move to money markot funds that pay average competitive returns.

Kate Leary Lee is chief investment officer and client contact.

Leavy Investment Management Inc.

First National Bank Building, 301 Junction Highway, Suite 323, Kerrville, Texas 78028; (512) 896-3900

Total assets managed	$500,000,000
Total discretionary	$500,000,000
Total tax-exempt assets	$500,000,000
Total discretionary tax-exempt	$500,000,000
Tax-exempt clients	32
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	4

Leavy Investment Management Inc. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach is value oriented and somewhat contrarian, focusing on identifying well-run financially sound companies whose stock is temporarily depressed.

Its primary fixed-income approach emphasizes high-quality (A or better) and intermediate maturities. The firm makes gradual changes in maturities in response to changes in interest rates and changes emphasis between Treasuries, agencies and corporates on the basis of current vs. historical yield spreads.

The asset mix Jan. 1 was 30% equities, 50% bonds and 20% cash.

The firm follows 200 stocks closely and 1,700, generally; 60% of research is generated internally.

John M. Leavy is chief investment officer; Barbara A. Reiser is client contact.

Lee Asset Management Co.

200 S. 333rd, Suite 109, Federal Way, Wash. 98003; (206) 838-1026

Total assets managed	$20,000,000
Total discretionary	$20,000,000
Total tax-exempt assets	$5,000,000
Total discretionary tax-exempt	$5,000,000
Tax-exempt clients	4
Types of accounts managed	CG
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	1

Lee Asset Management Co. is an active equity, active fixed-income and balanced manager.

Its equity approach is fundamentally oriented with price target disciplines and market trends. In addition to national names, the firm has strong focus on West and Northwest companies.

Its fixed-income approach use interest rate anticipation and sector analysis. Its investments are oriented toward high-quality instruments such as Treasuries and agencies. Investment-grade corporate bonds are used when rate spreads widen to justify the risk/reward.

The asset mix Jan. 1 was 80% stocks, 15% bonds and 5% cash.

The firm follows 100 stocks closely and 400, generally; 5% of the research is generated internally.

Laura E. Lee is chief investment officer; Carol M. Angvall is client contact.

Lee, Robinson & Steine Inc.

First American Center, Fourth Floor, Nashville, Tenn. 37238; (615) 748-2273

Total assets managed	$2,600,000,000
Total discretionary	$1,500,000,000
Total tax-exempt assets	$900,000,000
Total discretionary tax-exempt	$900,000,000
401(k)/457 assets managed	$50,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$2,500,000
No. of portfolio managers	8
Size of research staff	1

Lee, Robinson & Steine Inc. is an active equity, active fixed-income, balanced, short-term and tactical asset allocation manager.

The firm uses quantitatively based tactical asset allocation to control risk. In equities, a multifactor model and technical analysis are used, emphasizing value and momentum. Its fixed-income approach is based on interest rate anticipation with industry and quality sector analysis.

The asset mix Jan. 1 was 55% stocks and 45% bonds.

The firm follows 150 stocks closely and 300, generally; 20% of the research is generated internally.

The parent is 1st American Trust Co.

Charles Robinson is chief investment officer; Frederick Crown is client contact.

Legg Mason Capital Management Inc.

111 S. Calvert St., Baltimore, Md. 21208; (301) 547-2558

Total assets managed	$500,000,000
Total discretionary	$475,000,000
Total tax-exempt assets	$125,000,000
Total discretionary tax-exempt	$125,000,000
Mortgage-backed assets	$6,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	80
Types of accounts managed	CEFG
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	3

Legg Mason Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

The firm adheres to a broad, bottom-up, value-oriented equity approach. For fixed-income, it is a relative-value manager, buying issues in market sectors that appear on historical yield spread basis.

The asset mix Jan. 1 was 45% stocks, 30% bonds, 20% cash and 5% mortgage-backed securities.

The firm follows 40 stocks closely and 100, generally; 40% of the research is generated internally.

Philip E. Sachs is chief investment officer and client contact.

Lehigh Valley Bank

65 E. Elizabeth Ave., Bethlehem, Pa. 18018; (215) 861-1769

Total assets managed	$120,000,000
Total discretionary assets	$80,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
401(k)/457 plan assets	$20,000,000
Tax-exempt clients	30
Types of accounts managed	CG
Minimum separate account	$300,000
No. of portfolio managers	3

Lehigh Valley Bank is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses a growth stock style and Graham & Dodd analysis. Emphasis is on large-cap stocks and dividend paying ability. Its fixed-income approach uses interest rate anticipation; investments are divided 50% in governments and 50% in corporates; average maturity is four years.

The asset mix Jan. 1 was 30% stocks, 45% bonds and 25% cash.

The bank follows 30 stocks closely and 100, generally.

The parent is Independence Bancorp.

Edward A. Kramer is chief investment officer; Thomas Schreiber is client contact.

Lehman Ark Management

55 Water St., New York, N.Y. 10041; (212) 668-8500

Total assets managed	$13,377,000,000
Total discretionary	$13,377,000,000
Total tax-exempt assets	$12,634,000,000
Discretionary tax-exempt	$12,634,000,000
International cash assets	$794,000,000
Dedicated/immunized assets	$178,000,000
Tax-exempt clients	175
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	14
Size of research staff	5

Lehman Ark Management Co. Inc. is an active equity, active and passive fixed-income and balanced manager.

The firm manages two equity/balanced products: growth at a reasonable price, which invests in growth-oriented securities that sell at reasonable value; and basic value, a contrarian, value-oriented style. An aggressive growth product is event-oriented and emphasizes secular change.

Its active fixed-income approach is conservative, emphasizing high-quality intermediate securities and minimizing interest rate risk. The index products are customized, emphasizing controlled maturity movements while adding value through security selection and sector rotation.

The asset mix Jan. 1 was 50% equities, 36% bonds and 14% cash.

Coleman M. Brandt is chief investment officer; Scott Higgins, Charles Jarvis, Robert Norton, Joseph Scanlon and William Simmons are client contacts.

Lehndorff & Babson Real Estate Counsel

2501 Cedar Springs, Suite 550, Dallas, Texas 75201; (214) 855-5800

Total assets managed	$3,690,000,000
Total discretionary	$1,712,000,000
Total tax-exempt assets	$1,978,000,000
Total discretionary tax-exempt	$953,000,000
Equity real estate assets	$953,000,000
Tax-exempt clients	56
Types of accounts managed	CG
Minimum separate account	$25,000,000

Lehndorff & Babson Real Estate Counsel, an equity real estate manager, invests in substantially leased, well-located, income-producing properties in major metropolitan markets. The focus is on properties that will produce a predictable income stream.

All assets were in equity real estate Jan. 1.

The parent is The Lehndorff Group.

M. Thomas Lardner is chief investment officer; G. Andrews Smith is client contact.

P&I examines who owns the largest non-U.S. companies July 22.

Leith Wheeler Investment Counsel Ltd.

1930-609 Granville St., Vancouver, British Columbia, V7Y 1G5; (604) 683-3391

Total assets managed	$450,000,000
Total discretionary	$450,000,000
Total tax-exempt	$315,000,000
Total discretionary tax-exempt	$315,000,000
For subsidiaries of U.S. firms	$20,000,000
Minimum separate account	$1,000,000
No. of portfolio managers	6

Leith Wheeler Investment Counsel Ltd., a Canadian firm, is an active and passive equity, active and passive bond, balanced and short-term manager.

Its equity approach is value-oriented using low p/e stocks and Graham & Dodd principles. Its fixed-income approach uses interest rate anticipation with emphasis on short- to medium-term securities.

Murray Leith is chief investment officer; B.G. Scott is client contact.

The Leonard Management Group

407 W. Avon Road, Avon, Conn. 06001; (203) 673-3237

Total assets managed	$25,000,000
Total discretionary	$25,000,000
Total tax-exempt assets	$9,000,000
Total discretionary tax-exempt	$9,000,000
Tax-exempt clients	8
Types of accounts managed	CG
Minimum separate account	$250,000
No. of portfolio managers	1

The Leonard Management Group is an active equity, fixed-income, balanced and tactical asset allocation manager.

It applies a top-down philosophy to asset allocation and a value-oriented, bottom-up approach to security selection. Portfolios are overweighted with asset groups offering highest risk-adjusted returns. Options are used. Fixed-income investments are based on interest rate anticipation.

James P. Leonard is chief investment officer and client contact.

Leshner Financial Services

312 Walnut St., Cincinnati, Ohio 45202; (513) 629-2000

Total assets managed	$110,000,000
Total discretionary	$110,000,000
Total tax-exempt assets	$110,000,000
Total discretionary tax-exempt	$110,000,000
Tax-exempt clients	35
Types of accounts managed	CGJ
Minimum separate account	$250,000
No. of portfolio managers	6
Size of research staff	2

Leshner Financial Services Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, investing in companies with a consistent level of profitability that are being neglected by the market, purchased at or below the market p/e.

The key to its fixed-income approach is an econometric model that anticipates and reacts to changes in market trends.

The asset mix Jan. 1 was 63% stocks, 25% bonds and 12% cash.

The firm follows 65 stocks closely and 1,600, generally; 90% of the research is generated internally.

Thomas S. Mench is chief investment officer; Virginia G. Hamlin is client contact.

John A. Levin & Co. Inc.

1 Rockefeller Plaza, New York, N.Y. 10020; (212) 408-2800

Total assets managed	$1,629,000,000
Total discretionary	$1,629,000,000
Total tax-exempt assets	$713,000,000
Total discretionary tax-exempt	$713,000,000
Tax-exempt clients	114
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	4

John A. Levin & Co. Inc., an active equity manager, combines supply/demand factors with in-depth understanding of fundamentals for each security to identify value and limit risk). It focuses on companies with proprietary products, asset value or important new products. Options are used.

The asset mix 85% stocks and 15% cash on Jan. 1.

The firm follows 100 stocks closely and 200, generally.

John A. Levin is chief investment officer; Robert Bowers is the client contact.

Lexington Management

Park 80 West, Plaza II, Saddle Brook, N.J. 07662; (201) 845-7300

Total assets managed	$2,239,000,000
Total discretionary	$2,239,000,000
Total tax-exempt assets	$785,000,000
Total discretionary tax-exempt	$785,000,000
International equity assets	$234,000,000
International fixed-income	$18,000,000
Mortgage-backed assets	$40,000,000
Tax-exempt clients	48
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	10

Lexington Management Corp. is an active domestic and international/global equity and fixed-in-

come, balanced and short-term manager.

Its equity approach stresses relative value analysis. Seeking to preserve capital and earn a real rate of return, the firm will increase or decrease equity exposure based upon an analysis of risk factors in the investment environment. Options are used.

Its fixed-income approach uses interest rate anticipation and duration to manage portfolios; its neutral position is very defensive.

The asset mix Jan. 1 was 55.7% stocks, 29.5% bonds, 9.7% cash and 5.1% mortgage-backed securities.

The firm follows 200 stocks closely and 600, generally; 65% of research is generated internally.

The parent is Piedmont Management Co.

William S. Stack is chief investment officer; Joseph Barcic Jr. is client contact.

Leylegian Investment Management Inc.

855 Oak Grove Ave., Menlo Park, Calif. 94025; (415) 325-1055

Total assets managed	$375,000,000
Total discretionary	$375,000,000
Total tax-exempt assets	$375,000,000
Total discretionary tax-exempt	$375,000,000
Tax-exempt clients	22
Types of accounts managed	CEFJ
Minimum separate account	$10,000,000
No. of portfolio managers	3

Leylegian Investment Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses growth and low p/e stocks and sector rotation techniques. It uses a global top-down economic overview with heavy industry emphasis, and follows a sell discipline.

Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 100% stocks.

The firm generates 85% of its research internally.

Jack H. Leylegian II is chief investment officer; Dorothy P. Leylegian is the client contact.

Liberty National Bank and Trust Co. of Louisville

416 W. Jefferson St., Louisville, Ky. 40202; (502) 566-2000

Total assets managed	$3,750,000,000
Total discretionary assets	$2,250,000,000
Total tax-exempt assets	$1,700,000,000
Total discretionary tax-exempt	$1,200,000,000
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	10
Size of research staff	1

Liberty National Bank and Trust Co. of Louisville is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, defined generally by high-yield, low p/e, low beta, absolute price to book, earnings predictability and a willingness to switch investment focus. Emphasis is placed on sector/industry concentration as well as issue selection. Its fixed-income approach seeks below-average risk, but portfolios are fully managed to reflect changing risk-reward ratios.

The bank follows 200 stocks closely and 900, generally; all research is generated internally.

The parent is Liberty National Bancorp.

Robert C. Gray Jr. is chief investment officer; Guthrie P. Culbertson is client contact.

Lieber & Co.

2500 Westchester Ave., Purchase, N.Y. 10577; (914) 694-2020

Total assets managed	$3,465,000,000
Total discretionary	$3,465,000,000
Total tax-exempt assets	$754,000,000
Total discretionary tax-exempt	$754,000,000
Tax-exempt clients	39
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	11

Lieber & Co. is an active domestic and international equity, active bond, balanced and short-term manager.

The firm emphasizes growth, emerging growth and low p/e stocks. It is fundamentally research-oriented, concentrating on income or undervalued issues. It uses options.

The asset mix Jan. 1 was 67% stocks, 3% bonds and 30% cash.

The firm follows 300 stocks closely and 500, generally; all research is generated internally.

Stephen A. Lieber is chief investment officer; Nola M. Falcone is client contact.

Lincoln Capital Management

200 S. Wacker Drive, Suite 2100, Chicago, Ill. 60606; (312) 559-2880

Total assets managed	$17,050,000,000
Total discretionary	$17,050,000,000
Total tax-exempt assets	$16,484,000,000
Discretionary tax-exempt	$16,484,000,000
Fixed-income indexed assets	$6,135,000,000
Dedicated/immunized assets	$1,272,000,000
Tax-exempt clients	72
Types of accounts managed	CEFGJ
Minimum separate account	$100,000,000
No. of portfolio managers	11

Lincoln Capital Management is an active equity, active and passive bond and balanced manager.

Its equity approach emphasizes growth stocks. Its active fixed-income approach provides an assured minimum return; interest rate anticipation is employed. Enhanced and passive indexed management are offered.

The asset mix Jan. 1 was 28% stocks and 72% bonds.

The firm follows 230 stocks closely and generally.

J. Parker Hall III is chief investment officer and client contact.

Lincoln National Investment Management

1300 S. Clinton St., Fort Wayne, Ind. 46801; (219) 455-4740

Total assets managed	$22,539,000,000
Total discretionary assets	$22,539,000,000
Total tax-exempt assets	$10,884,000,000
Discretionary tax-exempt	$10,884,000,000
GICs	$1,567,000,000
Annuities	$1,390,000,000
Equity real estate assets	$100,000,000
Mortgage assets	$2,223,000,000
Mortgage-backed assets	$3,232,000,000
401(k)/457 assets managed	$611,000,000
Tax-exempt clients	3,180
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	17
Size of research staff	23

Lincoln National Investment Management employs a multimanager approach to provide equity, fixed-income, balanced, international, guaranteed and dedicated bonds/annuities management.

Five equity funds are offered, using quantitative analysis and growth and emerging growth stocks. Fixed-income approaches include core, government, short-term and long duration. Options and financial futures are used.

In addition to the assets above, $901 million in tax-exempt assets is managed on the firm's behalf by external managers.

The asset mix Jan. 1 was 42.1% bonds, 7.3% cash, 0.1% equity real estate, 20.6% mortgages and 29.9% mortgage-backed securities.

The parent is Lincoln National Corp.

Robert Crispin is chief investment officer; Bill L. Sanders is client contact.

Lipman, Carasso & Young

1880 Century Park East, Suite 1511, Los Angeles, Calif. 90067; (213) 282-0300

Total assets managed	$230,000,000
Total discretionary	$230,000,000
Total tax-exempt assets	$55,000,000
Total discretionary tax-exempt	$55,000,000
Tax-exempt clients	35
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	3

Lipman, Carasso & Young is an active equity, active bond and balanced manager.

Its equity approach seeks companies selling at reasonable valuations with sound balance sheets and above average prospects for growth in dividends, earnings and cash flow over the longer term.

Its modified ladder fixed-income approach analyzes changes in long-term interest rate trends and shifts gradually the average portfolio maturity rather than make abrupt changes. It buys high-quality, intermediate-term issues.

The firm follows 50 stocks closely and 200, generally.

Pierre Carasso is chief investment officer; Ms. Barrie Young is client contact.

Liquidity Fund

1900 Powell St., Emeryville, Calif. 94608; (415) 652-1462

Total assets managed	$135,000,000
Total discretionary	$135,000,000
Total tax-exempt assets	$50,000,000
Total discretionary tax-exempt	$50,000,000
Tax-exempt clients	130
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	15

Liquidity Fund, an active equity manager, manages portfolios of real estate securities that are purchased below net asset value. Securities include traded real estate equities and real estate limited partnerships.

Sean Subas is chief investment officer; Richard Wollack and Brent Donaldson are client contacts.

Llama Asset Management

1 McIlroy Plaza, Suite 302, Fayetteville, Ark. 72701; (501) 444-4000

Total assets managed	$63,000,000
Total discretionary	$63,000,000
Total tax-exempt assets	$54,000,000
Total discretionary tax-exempt	$54,000,000
Mortgage-backed assets	$7,000,000
Tax-exempt clients	6
Types of accounts managed	EFG
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	1

Llama Asset Management Co. is an active fixed income and short-term manager.

Its fixed-income approach uses sector analysis and individual issue selection to add value.

The asset mix Jan. 1 was 89% bonds and 11% mortgage-backed securities.

Charles E. Lanphier is chief investment officer and client contact.

In real estate investment banking, real estate comes first for a reason.

Opportunities still exist in today's real estate market, but to invest wisely you need more than sound financial advice.

The Cushman & Wakefield Financial Services Group provides expert financial assistance and access to capital markets worldwide. We also have precise, timely local market information and the real estate expertise to interpret it to your best advantage. This unparalleled combination separates Cushman & Wakefield from its investment banking competition.

CUSHMAN & WAKEFIELD
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented

RREEF USA Fund-III, Inc.

in the sale of
Cumberland Office Park
a 560,000 square foot office park in
Atlanta, Georgia
to
Prentiss Properties Acquisition Partners, L.P.

Cushman & Wakefield
1201 West Peachtree Street
Atlanta, GA 30309

CUSHMAN & WAKEFIELD
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented

NCNB

in the sale of
Republic Plaza
a 400,000 square foot office building in
Austin, Texas
to
The State of Texas

Cushman & Wakefield
1300 Post Oak Boulevard
Houston, TX 77056

CUSHMAN & WAKEFIELD
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented

Portland Fixture Limited Partnership

in the sale of
College Square Shopping Center
a 112,247 square foot retail center in
Portland, Oregon
to
Walumull Properties Corporation

Cushman & Wakefield
200 SW Market Street
Portland, OR 97201

CUSHMAN & WAKEFIELD
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented

Wang Laboratories, Inc.

in the sale of its interest in the
Clark Building
a 300,000 square foot office building in
Bethesda, Maryland
to
Clark Enterprises, Inc.

Cushman & Wakefield
1875 Eye Street, NW
Washington, DC 20006

CUSHMAN & WAKEFIELD
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented

Jonna Companies

in the placement of
5 Year Term Financing for
Novasweet Tech Center
a 117,000 square foot research and development center in
Novi, Michigan
with
Sanwa Business Credit Corporation

Cushman & Wakefield
27400 Northwestern Highway
Southfield, MI 48034

CUSHMAN & WAKEFIELD
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented

Pitney Bowes Real Estate Financing Corp.
a wholly-owned subsidiary of
Pitney Bowes Credit Corporation

in the acquisition of
11801 Roosevelt Boulevard
a 305,000 square foot industrial facility
St. Petersburg, Florida
with a leveraged lease to
Honeywell, Inc.
and the placement of First Mortgage Financing with
Prudential Capital Corp.

Cushman & Wakefield
9 West Broad Street
Stamford, CT 06902

Lombard Odier International Portfolio Management

13 Southampton Place, London, WC1A 2AJ U.K.; 071-831-2350

Total assets managed	$3,500,000,000
Total discretionary	$3,500,000,000
Total tax-exempt assets	$377,000,000
Total discretionary tax-exempt	$377,000,000
International equity assets	$220,000,000
International fixed-income	$157,000,000
Tax-exempt clients	7
Types of accounts managed	CF
Minimum separate account	$15,000,000
No. of portfolio managers	7
Size of research staff	45

Lombard Odier International Portfolio Management is an active domestic and international/global equity and bond, balanced and short-term manager.

Its equity approach uses top-down asset and regional allocation merried to well-staffed, bottom-up country and stock selection using all market capitalizations. Options are used.

Its fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 58% stocks and 42% bonds.

Seventy-five percent of research is generated internally.

The parent is Lombard Odier & Cie.

L.W. Harris is chief investment officer and client contact.

London & Bishopsgate International Inc.

866 Third Ave., New York, N.Y. 10022; (212) 605-4800

Total assets managed	$420,000,000
Total discretionary	$420,000,000
Total tax-exempt assets	$50,000,000
Total discretionary tax-exempt	$50,000,000
International equity assets	$10,000,000
International fixed-income	$11,000,000
International cash assets	$29,000,000
Tax-exempt clients	4
Types of accounts managed	CFG
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	3

London & Bishopsgate International Inc. is a global asset manager. In addition to global cash, equity and fixed-income programs, the firm offers global hedged trading accounts, commingled funds and corporate treasury advisory services.

In equities, the firm attempts to take advantage of imperfect linkages among the world equity markets. Customized indexed portfolios offering global, international or regional exposure can be enhanced by both currency and derivative market strategies. Active global equity allocation portfolios as well as global arbitrage programs are available.

In fixed-income, the firm attempts to add value through country allocation, currency exposure and derivative market strategies. Options and financial futures are used.

The asset mix Jan. 1 was 16% stocks, 24% bonds and 60% cash.

Andrew P. Smith is chief investment officer; David A. Goracy is client contact.

London Investment Advisors

7760 France Ave. S., Suite 730, Minneapolis, Minn. 55432; (612) 831-6226

Total assets managed	$119,000,000
Total discretionary	$119,000,000
Total tax-exempt assets	$116,000,000
Total discretionary tax-exempt	$116,000,000
Mortgage-backed assets	$20,000,000
Tax-exempt clients	17
Types of accounts managed	CE
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	1

London Investment Advisors is an active equity, active bond, balanced and short-term manager.

Its equity philosophy essentially is long-term and value-oriented with an emphasis on current income.

Its fixed-income approach is fairly active interest rate anticipation, changing maturity lengths. It tends to rotate toward areas of relative value.

The asset mix Jan. 1 was 11.5% stocks, 64.4% bonds, 6.8% cash and 17.3% mortgage-backed securities.

The firm follows 200 stocks closely and 3,000, generally; 60% of the research is generated internally.

John Kelly is chief investment officer; Gregg Hadlka is client contact.

Longfellow Investment Management Co.

190 High St., Boston, Mass. 01778; (617) 695-3504

Total assets managed	$135,000,000
Total discretionary	$135,000,000
Total tax-exempt assets	$135,000,000
Total discretionary tax-exempt	$135,000,000
Mortgage-backed assets	$42,000,000
Tax-exempt clients	14
Types of accounts managed	CEGJ
Minimum separate account	$2,000,000
No. of portfolio managers	3
Size of research staff	1

Longfellow Investment Management Co., an active fixed-income manager, bases its approach on short duration management. Portfolio average duration ranged from two to three years to limit interest rate risk. Value is added through sector/security selection.

The asset mix Jan. 1 was 30% bonds, 10% cash, 31% mortgage-backed securities and 29% asset-backed securities.

John Ciarleglio III and David W. Seeley are chief investment officers and client contacts.

Loomis, Sayles & Co. Inc.

1 Financial Center, Boston, Mass. 02111; (617) 482-2450

Total assets managed	$21,596,000,000
Total discretionary	$18,596,000,000
Total tax-exempt assets	$17,573,000,000
Discretionary tax-exempt	$15,618,000,000
Tax-exempt clients	493
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
Size of research staff	28

Loomis Sayles & Co. Inc. is an active domestic equity, active domestic and international/global fixed-income, balanced and options overwrite manager.

Its equity and fixed-income approaches are decentralized in regional offices, resulting in a broad range of investment styles. Options are used.

The firm follows 400 stocks closely; 70% of research is generated internally.

The parent is The New England.

Donald R. Shepherd is chief investment officer; Ralph D. Sinsheimer is client contact.

Lord, Abbett & Co.

767 Fifth Ave., New York, N.Y. 10153; (212) 848-1800

Total assets managed	$9,008,000,000
Total discretionary	$9,008,000,000
Total tax-exempt assets	$2,249,000,000
Total discretionary tax-exempt	$2,249,000,000
Tax-exempt clients	22
Types of accounts managed	CGJ
Minimum separate equity account	$25,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	12
Size of research staff	16

Lord, Abbett & Co. is an active domestic and international equity and fixed-income, balanced, short-term, high-yield, high-grade and convertible securities manager.

Its equity approach emphasizes securities with below average price-to-book ratios, below average price-earnings ratios and below average return on equity relative to corresponding ratios for the S&P 500. The firm manages high-grade fixed income using only issues of the U.S. government, its agencies and instrumentalities. Its non-traditional fixed-income management emphasizes high yield and convertible issues.

The asset mix Jan. 1 was 85% stocks, 9% bonds and 6% cash.

The firm follows 250 stocks closely and 900, generally; 90% of the research is generated internally.

Robert S. Dow, Thomas S. Henderson and E. Wayne Nordberg are the chief investment officers; Marilyn Fee White and Daria L. Foster are the client contacts.

Lowe, Brockenbrough, Tierney & Tattersall

6630 W. Broad St., Richmond, Va. 23230; (804) 288-0404

Total assets managed	$3,405,000,000
Total discretionary	$3,405,000,000
Total tax-exempt assets	$3,005,000,000
Total discretionary tax-exempt	$3,005,000,000
Mortgage-backed assets	$470,000,000
Tax-exempt clients	113
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	15
Size of research staff	8

Lowe, Brockenbrough, Tierney & Tattersall is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on quality growth stocks with above-average growth characteristics and below-average risk characteristics to maximize returns while preserving capital.

Its fixed-income approach strikes a balance between interest rate forecasting and sector selection.

The asset mix Jan. 1 was 30% stocks, 49% bonds, 5% cash and 16% mortgage-backed securities.

The firm follows 200 stocks closely and 1,000, generally; 50% of research is generated internally.

Austin Brockenbrough and Fred Tattersall are chief investment officers; Charles C. Field is client contact.

LVM Capital Management

530 Whites Road, Kalamazoo, Mich. 49008; (616) 385-2036

Total assets managed	$125,000,000
Total discretionary	$79,000,000
Total tax-exempt assets	$59,000,000
Total discretionary tax-exempt	$59,000,000
401(k)/457 assets managed	$12,000,000
Tax-exempt clients	38
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	1

LVM Capital Management Ltd. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach combines traditional measures of value with historical growth variables and trends in consensus earnings estimates to identify attractive stocks for further fundamental analysis. Options are used.

Fixed income is used to provide income and portfolio stability. Very limited duration shifts are made to add incremental return.

The asset mix Jan. 1 was 72% stocks, 22% bonds, 6% cash.

The firm follows 50 to 70 stocks closely and 50, generally; 95% of research is generated internally.

J. Russell Leonard is chief investment officer; L. Leonard Harrison is client contact.

Lynch & Mayer Inc.

650 Fifth Ave., New York, N.Y. 10019; (212) 246-7760

Total assets managed	$2,139,000,000
Total discretionary	$2,090,000,000
Total tax-exempt assets	$1,212,000,000
Total discretionary tax-exempt	$1,163,000,000
Tax-exempt clients	30
Types of accounts managed	CEFJ
Minimum separate account	$10,000,000
No. of portfolio managers	9
Size of research staff	1

Lynch & Mayer Inc. is an active equity, balanced and convertibles manager.

The firm manages high-quality growth stocks. Stock selection focuses on companies with a positive fundamental change and with a potential for a 50% stock price appreciation over an 18-month time horizon. Convertible securities portfolios also are managed according to the firm's growth stock philosophy.

The asset mix Jan. 1 was 87.8% stocks and 12.2% cash.

The firm generates 70% of its research internally.

The parent is Lincoln National Corp.

Dennis P. Lynch and Eldon C. Mayer Jr. are chief investment officers; W. Denman Zirkle is client contact.

M

MacKay-Shields Financial

9 W. 57th St., 37th Floor, New York, N.Y. 10019; (212) 758-5400

Total assets managed	$6,891,000,000
Total discretionary	$6,891,000,000
Total tax-exempt assets	$5,330,000,000
Total discretionary tax-exempt	$5,330,000,000
International equity assets	$49,000,000
International fixed-income	$112,000,000
Tax-exempt clients	62
Types of accounts managed	CEFG
No. of portfolio managers	16
Size of research staff	2

MacKay-Shields Financial Corp. is an active domestic and international/global equity, active domestic and international/global fixed-income, balanced, short-term cash and convertibles manager.

Its active growth emphasizes relative valuation and earnings and price momentum models; its active value approach uses quantitative screens to identify low p/e stocks meeting specific operating and financial criteria.

Its fixed-income approach is disciplined and risk-controlled, using sector analysis and moderate duration adjustments. Enhanced index fund management is offered.

The asset mix Jan. 1 was 17% stocks, 72% bonds, 8% convertibles and 3% global/international securities.

The firm follows 150 stocks closely and 7,200, generally; 60% to 70% of the research is generated internally.

The parent is New York Life Insurance Co.

Christina Seix is chief investment officer; Krista M. Woodall is client contact.

MacKenzie Financial Corp.

150 Bloor St. W., 4th Floor, Toronto, Ontario M5S 3B5; (416) 922-5322

Total assets managed	$7,000,000,000
Total discretionary	$7,000,000,000
Total tax-exempt	$2,000,000,000
Total discretionary tax-exempt	$2,000,000,000
Tax-exempt clients	20
Types of accounts managed	CEFGU
Minimum separate account	$20,000,000
No. of portfolio managers	6

MacKenzie Financial Corp., a Canadian firm, is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is theme-oriented, using all size capitalizations and a total return concept. The firm anticipates with a two- to five-year time horizon; protection of capital is fundamental.

Its fixed-income approach uses interest anticipation and high-quality securities. The firm buys in periods of perceived adversity and sells into investor euphoria.

The firm generates 60% to 70% of its research internally.

Alex Christ is chief investment officer; Paul Might is client contact.

The investment management software directory will run Sept. 2.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

Mackenzie Investment Management Inc.

700 S. Federal Highway, Boca Raton, Fla. 33432; (407) 393-8900

Total assets managed	$448,000,000
Total discretionary	$448,000,000
Total tax-exempt assets	$157,000,000
Total discretionary tax-exempt	$157,000,000
Tax-exempt clients	1
Types of accounts managed	G
No. of portfolio managers	9
Size of research staff	2

Mackenzie Investment Management Inc. is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, seeking low p/e and growth stocks. Its fixed-income approach uses interest rate anticipation.

The firm follows 150 stocks closely; 55% of the research is generated internally.

The parent is Mackenzie Financial Corp.

Michael G. Landry is chief investment officer; James Broadfoot is client contact.

Madison Investment Advisors

6411 Mineral Point Road, Madison, Wis. 53705; (800) 767-0300

Total assets managed	$434,000,000
Total discretionary	$434,000,000
Total tax-exempt assets	$358,000,000
Total discretionary tax-exempt	$358,000,000
Tax-exempt clients	95
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	5

Madison Investment Advisors, an active fixed-income manager, uses a proprietary model to determine directions of interest rates; average maturity is kept 10 years or less. Investments are in government/agency and investment-grade corporate securities. The firm is willing to dramatically shorten maturities to preserve capital when appropriate.

Frank E. Burgess is chief investment officer; Michael Schlageter is client contact.

Magten Asset Management

35 E. 21st St., New York, N.Y. 10010; (212) 529-6600

Total assets managed	$410,000,000
Total discretionary	$410,000,000
Total tax-exempt assets	$332,000,000
Total discretionary tax-exempt	$332,000,000
Tax-exempt clients	11
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	1

Magten Asset Management Corp. is a distressed and bankrupt securities manager.

Its approach is to invest in diversified portfolios of lower tier, high-yield securities of issuers in weak financial condition or experiencing poor operating results, with special emphasis on bankruptcies and turn-around situations.

These investments include companies with substantial capital needs or negative net worth that are cyclically depressed or downgraded by the rating services. The firm takes an active approach in restructurings and work-outs.

The asset mix Jan. 1 was 7% stocks, 73% bonds and 20% cash.

The firm follows 125 stocks closely and 300, generally; 75% of the research is generated internally.

Talton R. Embry is chief investment officer; Barbara Justiz is client contact.

Managed Investments Ltd.

10104 103rd Ave., Edmonton, Alberta T5J OH8; (403) 423-3544

Total assets managed	$400,000,000
Total discretionary	$400,000,000
Total tax-exempt	$320,000,000
Total discretionary tax-exempt	$320,000,000
Tax-exempt clients	23
U.S. subsidiaries	2
Types of accounts managed	CEFU
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	1

Managed Investments Ltd., a Canadian firm, is an active domestic and international equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach uses fundamental value analysis to select a core portfolio of stable, growth stocks. The firm then rotates exposure to cyclical and resource attacks through the economic cycle.

Its fixed-income approach relies on continuous monitoring of significant economic data and interest rate forecasting to determine the optimum mix of maturities and issues.

It follows 100 stocks closely and 50, generally; 25% of research is generated internally.

Val A. Valliant is chief investment officer and client contact.

Manning & Napier Advisors

1 Lincoln First Square, Suite 1100, Rochester, N.Y. 14604; (716) 325-6880

Total assets managed	$3,300,000,000
Total discretionary	$3,300,000,000
Total tax-exempt assets	$2,805,000,900
Total discretionary tax-exempt	$2,805,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
Size of research staff	16

Manning & Napier Advisors Inc. is an active fixed-income, short-term cash and balanced manager.

Its value-oriented equity approach uses low p/e stocks and Graham & Dodd analysis. It is based on specific equity selection strategies, using fixed-income securities as a valuation hurdle to earn superior risk-adjusted returns. Its fixed-income approach uses interest rate anticipation.

William Manning is chief investment officer; Richard Barrington is client contact.

Manufacturers Hanover Trust Co.- The Investment Management Group

270 Park Ave., New York, N.Y. 10017; (212) 270-9278

Total assets managed	$12,183,000,000
Total discretionary	$12,113,000,000
Total tax-exempt assets	$3,206,000,000
Total discretionary tax-exempt	$3,206,000,000
401(k)/457 assets managed	$140,000,000
Types of accounts managed	CEFJ
Minimum separate account	$500,000
No. of portfolio managers	60

Manufacturers Hanover Trust Co. — The Investment Management Group is an active and passive domestic equity, active fixed-income, balanced, active international/global equity and fixed-income, short-term, South-Africa-free, ADR, derivative security and regional manager.

Its equity approach is value-oriented, emphasizing fundamental analysis of earnings, asset values, cash flows and yields. Options are used.

In fixed-income accounts, market maturity/duration and sector weightings are determined through interest rate and currency forecasts based on macroeconomic, inflation and monetary assumptions.

The firm follows 530 stocks closely and 750, generally; 60% of research is generated internally.

The parent is Manufacturers Hanover Corp.

Henry E. Gooss is chief investment officer; Kathleen Furey is client contact.

Manufacturers National Bank of Detroit

100 Renaissance Center, 8th Floor, Detroit, Mich. 48243; (313) 222-4866

Total assets managed	$16,810,000,000
Total discretionary assets	$12,565,000,000
Total tax-exempt assets	$7,232,000,000
Total discretionary tax-exempt	$7,232,000,000
Real estate equity assets	$26,000,000
Equity indexed assets	$2,700,000,000
Fixed-income indexed assets	$30,000,000
401(k)/457 plan assets	$972,000,000
Tax-exempt clients	2,911
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	10
Size of research staff	8

Manufacturers National Bank of Detroit is an active and passive equity, active and passive bond, balanced, real estate and short-term manager.

Its equity approach emphasizes consistent growth with reasonable valuation. Its fixed-income approach emphasizes interest rate anticipation and sector analysis. Stock index futures are used in index funds.

For real estate, it uses real estate investment trusts and private deals.

The asset mix Jan. 1 was 47% stocks, 40% bonds and 13% cash.

The bank follows 200 stocks closely and 300, generally; 70% of research is generated internally.

The parent is Manufacturers National Corp.

Clinton P. Schloop is chief investment officer; Larry D. Rankens is client contact.

Manulife Financial

200 Bloor Street E., Toronto, Ontario M4W 1E5; (416) 926-6148

Total assets managed	$23,062,000,000
Total discretionary assets	$21,188,000,000
Total tax-exempt assets	$3,367,000,000
Total discretionary tax-exempt	$3,367,000,000
GICs	$1,532,000,000
Annuities	$20,000,000
Equity real estate assets	$87,000,000
Mortgage assets	$1,025,000,000
Mortgage-backed assets	$65,000,000
Tax-exempt clients	5,700
Types of accounts managed	CGU
Minimum separate account	$40,000,000
No. of portfolio managers	9
Size of research staff	11

Manulife Financial, a Canadian insurer, is an active equity, active fixed-income, balanced, short-term and GIC manager. The above statistics reflect U.S. tax-exempt assets only.

Using a bottom-up approach, its equity strategy is to identify companies with earnings growth rates greater than average and not reflected in market valuation. In fixed-income, it employs interest rate anticipation, using fiscal and monetary macroeconomic analyses and flow of funds and yield curve analyses. Options are used.

The separate account asset mix Jan. 1 was 8.5% stocks, 54.5% bonds, 2.5% cash, 2% equity real estate, 30.5% mortgages and 2% mortgage-backed securities.

The insurer follows 600 stocks closely and 4,500, generally; 15% of research is generated internally.

The parent is The Manufacturers Life Insurance Co.

George Neal is chief investment officer; Joseph Scott is client contact.

ManuVest

250 Bloor St. E., Suite 100, Toronto, Ontario M4W 1E5; (416) 926-5550

Total assets managed	$941,000,000
Total discretionary	$941,000,000
Total tax-exempt	$941,000,000
Total discretionary tax-exempt	$941,000,000
For subsidiaries of U.S. firms	$150,000,000
Mortgage assets	$47,000,000
Non-Canadian equities	$42,000,000
Tax-exempt clients	201
U.S. subsidiaries	18
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	7

Manufest, a Canadian firm, is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Its active, top-down equity approach is driven by earnings momentum. Its active fixed-income approach is risk averse.

The asset mix Jan. 1 was 24.6% Canadian stocks, [illegible]% bonds, 16.5% cash, 4.7% mortgages and [illegible]% non-Canadian equities.

It follows 50 stocks closely and 150, generally; 20% of research is generated internally.

The parent is The Manufacturers Life Insurance Co.

[illegible] E. Neal is chief investment officer; Norman [illegible]rr is client contact.

Marathon Asset Management Co. Inc.

1250 Prospect St., P.O. Box 9117, La Jolla, Calif. 92038; (619) 456-8033

Total assets managed	$100,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$100,000,000
Total discretionary tax-exempt	$100,000,000
Tax-exempt clients	16
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	4

Marathon Asset Management Co. Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach a quantitative, value-oriented and risk-averse, focusing on stocks with positive earnings momentum and low p/e. There are strict cash-control disciplines. Its fixed-income approach is quantitative, with maturities determined by a proprietary formula weighting monetary, economic and market conditions.

The asset mix Jan. 1 was 30% stocks, 20% bonds and 50% cash.

The firm follows 100 stocks closely and 1,500, generally; all research is generated internally.

Thomas J. Feeney is chief investment officer; Kathleen A. Feeney is client contact.

Marathon, London

140A Gloucester Mansions, Cambridge Circus, London WC2H 8HD U.K.; 071-497-2211

Total assets managed	$260,000,000
Total discretionary	$260,000,000
Total tax-exempt assets	$60,000,000
Total discretionary tax-exempt	$60,000,000
International equity assets	$60,000,000
Tax-exempt clients	4
Types of accounts managed	CFG
Minimum separate account	$25,000,000
No. of portfolio managers	3

Marathon, London, an active international/global equity manager, follows a qualitative, flexible investment approach.

Monetary trends and confidence levels are used to determine asset allocation. Risk is minimized by avoiding extreme bets against benchmark country weightings. Sectors are chosen using long-term capital cycle analysis, and companies are selected that reinvest retained earnings.

The asset mix Jan. 1 was 100% stocks.

The firm follows 200 stocks closely and 4,000, generally; 66% of the research is generated internally.

Jeremy J. Hosking is chief investment officer; Helen Blanchard is client contact at (203) 268-0105.

Marinvest

250 Park Ave., New York, N.Y. 10177; (212) 503-6815

Total assets managed	$3,032,000,000
Total discretionary	$3,032,000,000
Total tax-exempt assets	$798,000,000
Total discretionary tax-exempt	$798,000,000
401(k)/457 assets managed	$136,000,000
Tax-exempt clients	19
Types of accounts managed	CEFJ
Minimum separate equity account	$5,000,000
Minimum separate bond account	$10,000,000

Marinvest is an active equity, active bond, balanced and short-term manager.

Its value-oriented equity approach uses a combination of value screens and internal, fundamental analysis to identify securities that appear undervalued relative to their industry and the overall market.

Its fixed-income approach involves interest rate anticipation, sector analysis and duration and convexity management. Value is added through a three-step process: duration targeting, maturity structuring and spread analysis.

The asset mix Jan. 1 was 14.4% stocks, 22.1% bonds and 63.5% cash.

The parents are Wardley Investor Services Ltd. and Hong Kong Bank Group.

Wayne Wong and Leo Grohowski are chief investment officers.

Markston Investment Management

633 Third Ave., 17th Floor, New York, N.Y. 10017; (212) 972-3120

Total assets managed	$451,000,000
Total discretionary	$451,000,000
Total tax-exempt assets	$373,000,000
Total discretionary tax-exempt	$373,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	3
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	3

Markston Investment Management, an active equity manager, targets soundly profitable businesses run by good management selling at bargain prices.

The asset mix Jan. 1 was 87.1% stocks and 12.9% cash.

The firm follows 225 stocks closely and 325, generally; 90% of the research is generated internally.

The parent is Mutual Benefit Life Insurance.

John R. Stone is chief investment officer and client contact.

Marlborough Capital Advisors Inc.

399 Boylston St., Boston, Mass. 02116; (617) 578-1722

Total assets managed	$153,000,000
Total discretionary	$153,000,000
Total tax-exempt assets	$41,000,000
Total discretionary tax-exempt	$41,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$50,000,000
No. of portfolio managers	3

Marlborough Capital Advisors Inc. actively manages mezzanine financings and participates in venture capital and leveraged buy-out limited partnerships.

All assets were in mezzanine financings and limited partnerships Jan. 1.

The parent is The New England.

Margaret L. Lanoix is chief investment officer; Ms. Lanoix, Gayle M. Slattery and Timothy J. Durkin are client contacts.

ANALITICA

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The Marshall Plan
31 Milk St., Suite 420, Boston, Mass. 02109; (617) 482-4640

Total assets managed	$42,000,000
Total discretionary	$42,000,000
Total tax-exempt assets	$42,000,000
Total discretionary tax-exempt	$42,000,000
Tax-exempt clients	2
Types of accounts managed	G
Minimum separate account	$3,000,000
No. of portfolio managers	1
Size of research staff	2

The Marshall Plan, an active equity manager, rotates assets among four market segments: small-cap growth, large-cap growth, small-cap value and large-cap value. Quantitative models are used to rank and select stocks.

The asset mix Jan. 1 was 99.3% stocks and 0.7% cash.

The firm follows 2,000 stocks closely; all research is generated internally.

The parent is GEM Advisors Inc.

Greta E. Marshall is chief investment officer and client contact.

Marshall & Sullivan Inc.
1001 Fourth Avenue Plaza, Suite 4131, Seattle, Wash. 98154; (206) 621-9014

Total assets managed	$235,000,000
Total discretionary	$235,000,000
Total tax-exempt assets	$145,000,000
Total discretionary tax-exempt	$145,000,000
401(k)/457 assets managed	$7,000,000
Tax-exempt clients	154
Types of accounts managed	CEFJ
Minimum separate account	$300,000
No. of portfolio managers	5

Marshall & Sullivan Inc. is an active equity, passive fixed-income and balanced manager.

Its equity approach seeks high-quality companies with superior per share and growth rates at an attractive price. Its fixed-income approach emphasizes short to intermediate portfolios of laddered U.S. Treasury and government agency securities.

The asset mix Jan. 1 was 55% stocks, 40% bonds and 5% cash.

The firm follows 50 stocks closely and 350, generally; 50% of the research is generated internally.

Ronald Marshall is chief investment officer; William Frey and Brien Elvins are client contacts.

Martingale Asset Management
12 Marshall St., Boston, Mass. 02108; (617) 720-1334

Total assets managed	$275,000,000
Total discretionary	$275,000,000
Total tax-exempt assets	$202,000,000
Total discretionary tax-exempt	$202,000,000
Tax-exempt clients	6
Types of accounts managed	CFJ
No. of portfolio managers	3
Size of research staff	1

Martingale Asset Management is an active equity, hedged equity and equity completeness manager.

The firm is value-oriented and uses quantitative techniques. Both long-only and systematically hedged (long and short) equity accounts are managed. The investment process combines a proprietary stock selection model and portfolio construction. Consistency of high expected returns relative to the client's benchmark is stressed. Options and stock index futures are used.

The asset mix Jan. 1 was 99% stocks and 1% cash.

William E. Jacques is chief investment officer; Arnold S. Wood is client contact.

Marvin & Palmer Associates
1 Commerce Center, Suite 1100, Wilmington, Del. 19801; (302) 573-3570

Total assets managed	$450,000,000
Total discretionary	$450,000,000
Total tax-exempt assets	$400,000,000
Total discretionary tax-exempt	$400,000,000
International equity assets	$400,000,000
Tax-exempt clients	18
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	5

Marvin & Palmer Associates Inc., an active domestic and international/global equity manager, combines fundamental and technical research, treating currency as a separate asset category.

All assets were in international stocks Jan. 1.

The firm follows 200 stocks closely and 500, generally; all research is generated internally.

David Marvin is chief investment officer; Jon Stiklorius is client contact.

Massachusetts Financial Services
500 Boylston St., Boston, Mass. 02116; (617) 954-5757

Total assets managed	$24,646,000,000
Total discretionary	$24,637,000,000
Total tax-exempt assets	$2,022,000,000
Total discretionary tax-exempt	$2,012,000,000
International fixed-income	$313,000,000
Mortgage-backed assets	$40,000,000
401(k)/457 assets managed	$26,000,000
Tax-exempt clients	23
Types of accounts managed	CEFG
Minimum separate account	$20,000,000
No. of portfolio managers	33
Size of research staff	26

Massachusetts Financial Services is an active equity, active domestic and international fixed-income, balanced and short-term manager.

Its equity approach emphasizes growth stock. Security selection is based on a combination of fundamental analysis to determine prospective earnings momentum and technical screens for market price momentum. It heavily weights industries and companies that are determined to have above-average market potential. It is broadly diversified among individual holdings. In fixed-income, yield curve and fundamental analysis is used to determine maturity structure. Sector analysis and swapping are used to add incremental value. Options and fixed-income futures are used.

The asset mix Jan. 1 was 8.8% stocks, 70% bonds, 3.6% cash, 2% mortgage-backed securities and 15.6% foreign bonds.

The parent is Sun Life Assurance Co. of Canada, U.S.

A. Keith Brodkin is chief investment officer; James H. Kelly, Eileen M. McCaffery and Jeffrey D. Vivian are client contacts.

Massachusetts Mutual Life Insurance Co.
1295 State St., Springfield, Mass. 01111; (413) 788-8411

Total assets managed	$25,651,000,000
Total discretionary assets	$25,651,000,000
Total tax-exempt assets	$14,531,000,000
Discretionary tax-exempt	$14,531,000,000
GICs	$4,805,000,000
Annuities	$1,965,000,000
Equity real estate assets	$180,000,000
Mortgage assets	$4,121,000,000
Mortgage-backed assets	$2,413,000,000
401(k)/457 assets managed	$5,700,000,000
Tax-exempt clients	3,200
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	21

Massachusetts Mutual Life Insurance Co. is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach emphasizes low p/e stocks and yield, identifying financially strong companies with a history of dividend growth purchased at discounted valuation levels. Its fixed-income approach is based on sector analysis.

Its real estate approach emphasizes well-diversified portfolios with a balance between cash and price appreciation.

The separate account asset mix Jan. 1 was 79% stocks, 7% bonds, 7% cash and 7% real estate equity.

The insurer follows 100 stocks closely and 150, generally; 50% of research is generated internally.

Richard G. Dooley is chief investment officer; Peter J. Vogian is client contact.

Matrix Capital Management
1 Greenwich Plaza, Greenwich, Conn. 06830; (203) 629-4400

Total assets managed	$696,000,000
Total discretionary	$696,000,000
Total tax-exempt assets	$696,000,000
Total discretionary tax-exempt	$696,000,000
Tax-exempt clients	18
Types of accounts managed	CEFJ
Minimum separate account	$10,000,000
No. of portfolio managers	6

Matrix Capital Management is an active domestic and international equity and fixed-income, balanced and tactical asset allocation manager.

Its equity approach is quantitative, using sector rotation. Its fixed-income approach also is quantitative.

The asset mix Jan. 1 was 60% stocks and 40% fixed income.

The firm follows 1,300 stocks closely and 1,700, generally; 85% of research is generated internally.

Michael A. Petrino is chief investment officer; Clarissa Moore is client contact.

Matuschka & Co.
15 Valley Drive, Greenwich, Conn. 06831; (203) 869-5866

Total assets managed	$1,537,[illegible]
Total discretionary	$1,927,[illegible]
Total tax-exempt assets	$80,[illegible]
Total discretionary tax-exempt	$80,[illegible]
International equity assets	$75,[illegible]
International cash assets	$5,[illegible]
Tax-exempt clients	6
Types of accounts managed	CG
Minimum separate account	$10,[illegible]
No. of portfolio managers	10
Size of research staff	7

Matuschka & Co. is an active domestic and international equity and fixed-income, balanced and active currency manager.

Its international equity approach is to construct portfolios with the following characteristics: stability of country weightings, active industry rotations and active currency management. Its currency approach combines fundamental and technical analysis, attempting to exploit currency trends.

Its global bond approach is a highly disciplined combination of fundamental and technical analysis, optimized for efficient portfolio structure. The firm employs a separate currency overlay management program.

The asset mix Jan. 1 was 93.7% stocks and 6.3% cash.

The parent is Matuschka Group.

Michael Kraemer is chief investment officer; Christopher J. Carey is client contact.

McBryan Malone & Russell
Park Road Plaza, Box 144A, RD 11, Reading, Pa. 19607; (215) 777-8110

Total assets managed	$71,000,000
Total discretionary	$71,000,000
Total tax-exempt assets	$55,000,000
Total discretionary tax-exempt	$55,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	64
Types of accounts managed	CEFG
Minimum separate account	$100,000
No. of portfolio managers	3

McBryan Malone & Russell Inc. is an active equity, short-term and option writing manager.

Its equity approach focuses on option writing and hedging. Stocks are selected that are unlikely to decline in value, have good financial characteristics and are selling at a fair value. Once a stock is bought, the firm sells call options. Options are used.

The asset mix Jan. 1 was 75% stocks, 10% bonds and 15% cash.

Donald J. McBryan is chief investment officer; William J. Russell Jr. is client contact.

McCowan Associates
125 E. 38th St., New York, N.Y. 10016; (212) 545-8700

Total assets managed	$1,003,000,000
Total discretionary	$995,000,000
Total tax-exempt assets	$796,000,000
Total discretionary tax-exempt	$796,000,000
Dedicated/immunized assets	$7,000,000
Tax-exempt clients	16
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	3

McCowan Associates Inc. is an active equity, active and passive fixed-income and balanced manager.

For equities, it invests in companies with prospects for sustainable above-average earnings growth and profitability. Up to 40% of general portfolios and all special equity portfolios are invested in small and medium-size growth companies.

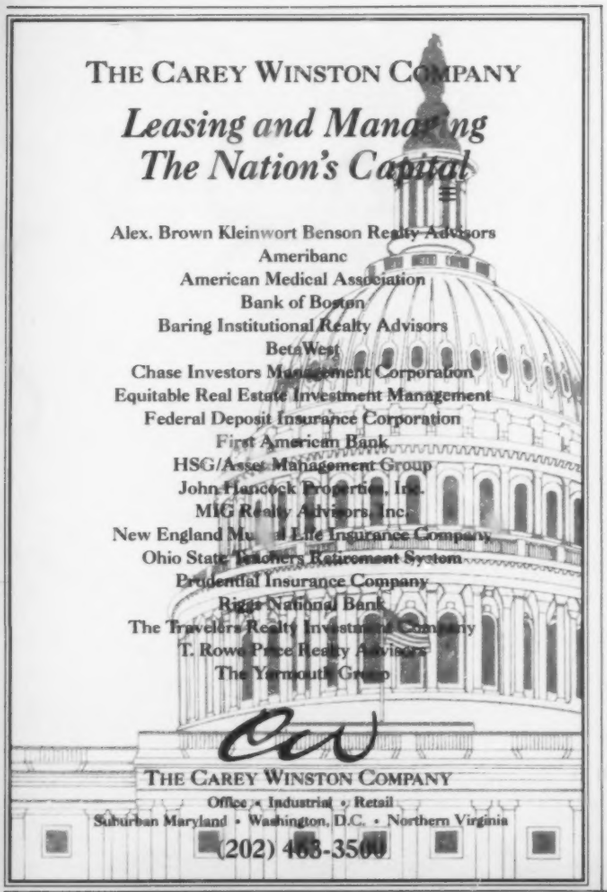
Its fixed-income approach believes the primary determinant of returns is the term structure of the portfolio. As a result, an interest rate anticipation structure is used.

The asset mix Jan. 1 was 78% stocks, 7% bonds and 15% cash.

Bruce J. McCowan is chief investment officer; Anne G. Werner is client contact.

McCullough, Andrews & Cappiello Inc.
101 California St., Suite 4250, San Francisco, Calif. 94111; (415) 956-8700

Total assets managed	$1,000,000,000
Total discretionary	$1,000,000,000
Total tax-exempt assets	$750,000,000
Total discretionary tax-exempt	$750,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	78
Types of accounts managed	CEFG



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Minimum separate account $1,000,000
No. of portfolio managers 6
Size of research staff 3

McCullough, Andrews & Cappiello Inc. is an active equity, active bond, balanced and short-term cash manager.

Its equity approach is based on maintenance of buying power through growth of earnings and dividends on relatively low p/e values purchased on a timely basis at the lower end of their relative trading ranges.

Its fixed-income approach uses interest rate anticipation with an emphasis on liquidity and quality; identification of major trends is paramount.

The asset mix Jan. 1 was 68% stocks, 22% bonds and 10% cash.

The firm generates 50% of its research internally.

Julie J. Baimes is client contact.

McGlinn Capital Management Inc.

850 N. Wyomissing Blvd., P.O. Box 6158, Wyomissing, Pa. 19610; (215) 374-5125

Total assets managed $2,400,000,000
Total discretionary $2,400,000,000
Total tax-exempt assets $2,020,000,000
Total discretionary tax-exempt $2,020,000,000
Dedicated/immunized assets .. $638,000,000
401(k)/457 assets managed $37,000,000
Tax-exempt clients 80
Types of accounts managed ..... CEFGJ
Minimum separate account $10,000,000
No. of portfolio managers 7

McGlinn Capital Management Inc. is an active equity, active and passive fixed-income and balanced manager.

Its top-down equity approach combines low p/e stocks, Graham & Dodd analysis, sector rotation, market timing and quantitative analysis.

Its fixed-income approach focuses on interest rate direction and the posture of the Federal Reserve Board. Portfolios are concentrated in intermediate-term government and high-quality corporate issues. Options and financial futures are used.

The asset mix Jan. 1 was 40% stocks, 55% bonds and 5% cash.

The firm follows 100 stocks closely and 400, generally; 40% of research is generated internally.

Terrence J. McGlinn is chief investment officer; James A. Walker is client contact.

C.S. McKee & Co. Inc.

1 Gateway Center, Pittsburgh, Pa., 15222; (412) 566-1234

Total assets managed $1,331,000,000
Total discretionary $1,331,000,000
Total tax-exempt assets $1,331,000,000
Total discretionary tax-exempt $1,331,000,000
International equity assets $13,000,000
Dedicated/immunized assets ... $16,000,000
Tax-exempt clients 90
Types of accounts managed ..... CEFGJ
Minimum separate account $2,000,000
No. of portfolio managers 7

C.S. McKee & Co. Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is risk averse and opportunistic, emphasizing a bottom-up style. For risk avoidance, it uses systematic diversification and periodic reduction of equity exposure. It stresses value-oriented selection, including low p/e and earnings momentum.

Its fixed-income approach is also risk averse and opportunistic. The primary decision is the identification of interest rate direction, with shifts in maturity structure and sectors adding incremental returns.

The asset mix Jan. 1 was 32% stocks, 60% bonds, 7% cash and 1% international equities.

The firm follows 35 to 40 stocks closely and 1,000, generally; 60% of research is generated internally.

The parent is United Asset Management.

Charles E. Jacobs is chief investment officer; James H. Hanes is client contact.

McLean, Budden Ltd.

390 Bay St., Suite 1000, Toronto, Ontario M5H 2Y2; (416) 862-9800

Total assets managed $1,600,000,000
Total discretionary $1,500,,000,000
Total tax-exempt $1,300,000,000
Total discretionary tax-exempt $1,200,000,000
For subsidiaries of U.S. firms $350,000,000
Tax-exempt clients 48
U.S. subsidiaries 6
Types of accounts managed ..... CEFGU
Minimum separate account $5,000,000
No. of portfolio managers 8
Size of research staff 2

McLean, Budden Ltd., a Canadian firm, is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Its equity approach seeks the most attractive issues in a generally high-cap universe of the top 100 companies in Canada and the United States. Long-term earnings growth is stressed. Its fixed-income approach relies on modest interest rate, sector and quality adjustments to add value. Over a market cycle, yield will generally be above the median.

The asset mix Jan. 1 was 37.5% Canadian stocks, 7% U.S. stocks, 50% bonds, 2.5% cash and 3% offshore equity.

The firm follows 100 stocks closely and 200, generally; 50% of research is generated internally.

The parent is Gartmore/Indosuez Asset Management.

Douglas Mahaffy is chief executive officer; E.A. "Ted" Harris is client contact.

Investment consultants: Nov. 11.

McMillion Capital Management Inc.

P.O. Box 21447, Greensboro, N.C. 27420; (919) 274-2491

Total assets managed $77,000,000
Total discretionary $77,000,000
Total tax-exempt assets $23,000,000
Total discretionary tax-exempt .. $23,000,000
401(k)/457 assets managed $1,000,000
Tax-exempt clients 19
Types of accounts managed ..... CF
Minimum separate account $500,000
No. of portfolio managers 4
Size of research staff 2

McMillion Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its top-down investment approach uses economic, fundamental and technical resources to identify emerging secular trends. Monetary, fiscal and trade policies are analyzed to pinpoint developing themes and sectors. Proprietary earnings momentum and valuation screens aid in identifying undervalued issues. Options are used.

The asset mix Jan. 1 was 40% stocks; 45% bonds; and 15% cash.

The firm follows 200 stocks closely and 3,000, generally; 30% of research is generated internally.

The parent is McMillion Associates Inc.

P. Lawrence Wingate is chief investment officer; William B. Carr is client contact.

McMorgan & Co.

1 Bush St., Suite 800, San Francisco, Calif. 94104; (415) 788-9300

Total assets managed $8,400,000,000
Total discretionary $8,400,000,000
Total tax-exempt assets $8,400,000,000
Total discretionary tax-exempt $8,400,000,000
Equity real estate assets $588,000,000
Mortgage assets $1,092,000,000
Mortgage-backed assets $1,512,000,000
Tax-exempt clients 86
Types of accounts managed ..... J
No. of portfolio managers 11

McMorgan & Co. is an active equity, active fixed-income, balanced, real estate and short-term cash manager.

Its equity investment philosophy is to invest in high-quality securities that have longer-term attraction without exposure to substantial risk.

The fixed-income philosophy is fundamentally based, carefully controlling aggregate portfolio risk through duration monitoring and control.

The asset mix Jan. 1 was 28% stocks, 27% bonds, 7% cash, 7% equity real estate, 13% mortgages and 18% mortgage-backed securities.

The firm follows 90 stocks closely and 150, generally; 10% of research is generated internally.

Melvin W. Petersen is chief investment officer; William O. Sumner is client contact.

R. Meeder & Associates Inc.

6000 Memorial Dr., Dublin, Ohio 43017; (614) 766-7000

Total assets managed $454,000,000
Total discretionary $454,000,000
Total tax-exempt assets $432,000,000
Total discretionary tax-exempt . $432,000,000
International cash assets $8,000,000
Equity indexed assets $10,000,000
Tax-exempt clients 124
Types of accounts managed ..... CEFJ
Minimum separate account $3,000,000
No. of portfolio managers 5

R. Meeder & Associates Inc. is an active and passive equity and fixed-income, balanced and global cash manager.

Its equity philosophy is based on capital preservation; tactical asset allocation disciplines are implemented through a clearly defined decision process. Its fixed-income approach is based on active maturity management implemented through an objective and quantitative decision process that maximizes the predictability of returns. Options and financial futures are used.

The asset mix Jan. 1 was 45% stocks, 12% bonds and 43% cash.

The firm follows 150 stocks closely and 500, generally; all research is generated internally.

Robert Meeder and Philip Voelker are chief investment officers; Robert D. Baker is client contact.

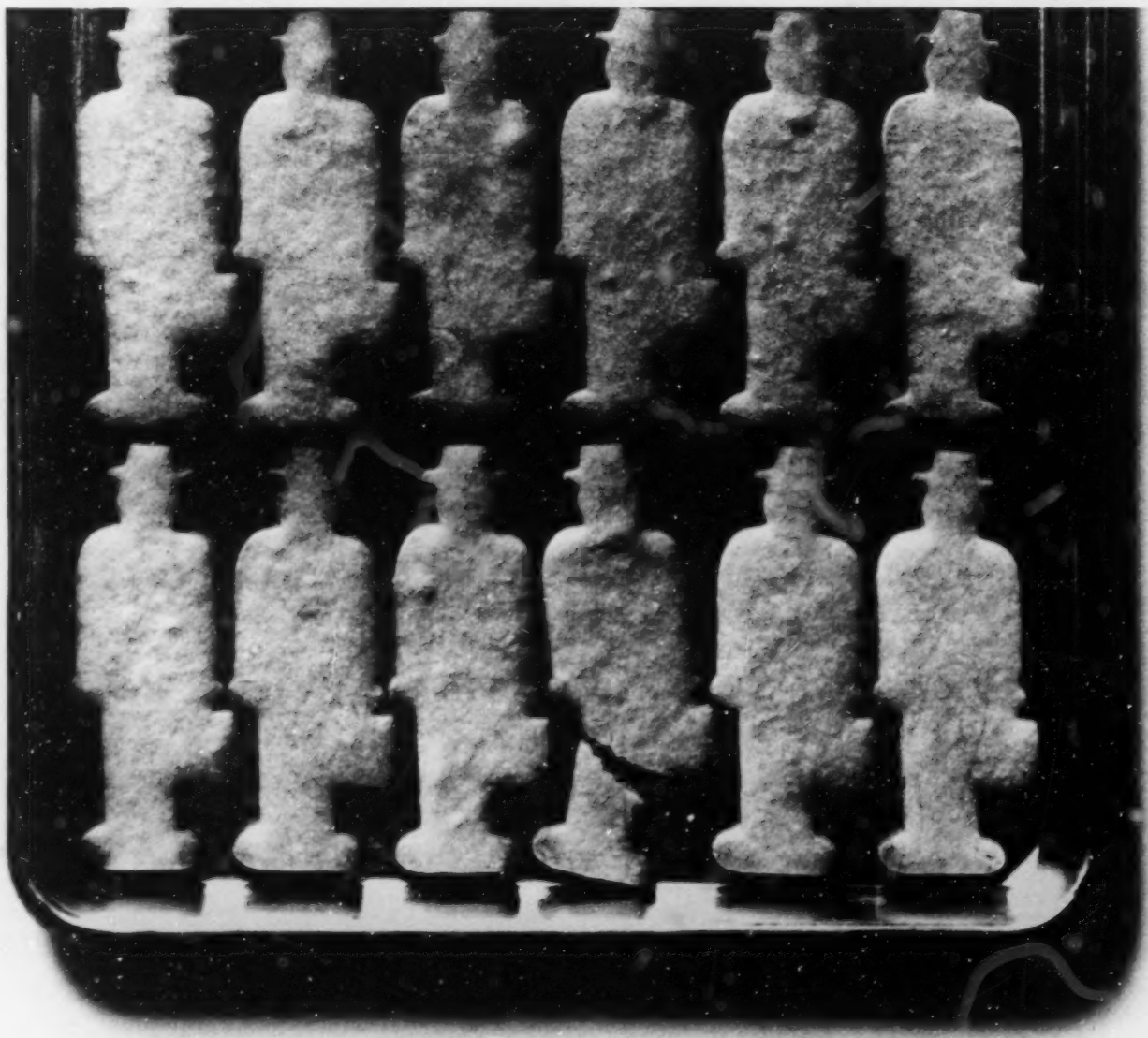
Mellon Bond Associates

1 Mellon Bank Center, Suite 4135, Pittsburgh, Pa. 15258-0001; (412) 234-3602

Total assets managed $20,985,000,000
Total discretionary $20,985,000,000
Total tax-exempt assets $20,046,000,000
Discretionary tax-exempt .. $20,046,000,000
Fixed-income indexed assets . $7,173,000,000
Dedicated/immunized assets .. $1,783,000,000
Tax-exempt clients 98
Types of accounts managed ..... CEFGJ
Minimum separate account $5,000,000
No. of portfolio managers 14
Size of research staff 4

Mellon Bond Associates is an active and passive fixed-income and short-term manager.

The firm establishes a performance benchmark for each actively managed account, followed by strict control of duration, yield, income and cash



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flow structure. Value is added by sector/quality spread valuation and issue selection.

All assets were in fixed income Jan. 1.

The parent is Mellon Bank Corp.

Paul R. McCann is chief investment officer; William F. Adam is client contact.

Mellon Capital Management

595 Market St., Suite 2900, San Francisco, Calif. 94105; (415) 546-6056

Total assets managed	$29,520,000,000
Total discretionary assets	$29,520,000,000
Total tax-exempt assets	$29,195,000,000
Discretionary tax-exempt	$29,195,000,000
International equity assets	$455,000,000
Equity indexed assets	$23,390,000,000
Fixed-income indexed assets	$5,675,000,000
Tax-exempt clients	253
Types of accounts managed	CEFG
No. of portfolio managers	12

Mellon Capital Management Corp. is a passive equity and fixed-income, passive international/global equity, balanced, tactical asset allocation, tailored portfolio, derivatives-enhanced manager.

Quantitative methods are used, as are options and financial futures.

The asset mix Jan. 1 was 81% stocks and 19% bonds.

The parent is Mellon Bank Corp.

William L. Fouse is chief investment officer; Cary Zellerbach is client contact.

Mellon Equity Associates

500 Grant St., Suite 3700, Pittsburgh, Pa. 15258; (412) 234-1394

Total assets managed	$3,458,000,000
Total discretionary	$3,458,000,000
Total tax-exempt assets	$3,458,000,000
Total discretionary tax-exempt	$3,458,000,000
401(k)/457 assets managed	$262,000,000
Tax-exempt clients	44
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	7

Mellon Equity Associates is an active equity and balanced manager.

Its equity approach is quantitative, with disciplined security valuation and portfolio construction processes designed to maximize expected return per unit risk taken. Financial futures are used.

The asset mix Jan. 1 was 90% stocks, 8% bonds and 2% cash.

The firm follows 1,500 stocks closely and 2,000, generally; 80% of research is generated internally.

The parent is Mellon Bank Corp.

William P. Rydell is chief investment officer; Patricia K. Nichols is client contact.

Mellon/McMahan Real Estate Advisors Inc.

444 Market St., Suite 2100, San Francisco, Calif. 94111; (415) 433-7770

Total assets managed	$1,202,000,000
Total discretionary	$1,202,000,000
Total tax-exempt assets	$988,000,000
Total discretionary tax-exempt	$988,000,000
Equity real estate assets	$879,000,000
Mortgage assets	$109,000,000
Tax-exempt clients	16
Types of accounts managed	CG
Minimum separate account	$50,000,000
No. of portfolio managers	10
Size of research staff	3

Mellon/McMahan Real Estate Advisors Inc., a real estate investment adviser, acquires high-quality, operating retail, office and industrial properties in growth corridors of major metropolitan areas throughout the United States. The firm adds value through "hands-on" asset management. Dispositions are reviewed annually and sale is strategically timed to coincide with favorable market conditions.

The asset mix Jan. 1 was 89% equity real estate and 11% mortgages.

The parent is Mellon Bank N.A.

Thomas C. Clark is chief investment officer; Barry Rillet is client contact.

L.J. Melody & Co.

584 ' San Felipe, Suite 4400, Houston, Texas 77057; (713) 787-1900

Total assets managed	$2,100,000,000
Total discretionary	$900,000,000
Total tax-exempt assets	$900,000,000
Total discretionary tax-exempt	$900,000,000
Equity real estate assets	$550,000,000
Mortgage assets	$350,000,000
Tax-exempt clients	7
Types of accounts managed	G
Minimum separate account	$50,000,000

L.J. Melody & Co., a real estate manager, acquires and manages hybrid debt and equity real estate investments nationwide through separate account relationships.

The asset mix Jan. 1 was 61% equity real estate and 39% mortgages.

Lawrence J. Melody is chief investment officer; Robert D. Barkley is client contact.

Mendel Money Management

1200 Shermer Road, Suite 220, Northbrook, Ill. 60062; (708) 564-0970

Total assets managed	$13,000,000
Total discretionary	$13,000,000
Total tax-exempt assets	$10,000,000
Total discretionary tax-exempt	$7,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$100,000
No. of portfolio managers	1

Mendel Money Management Inc. is an active and passive equity, active and passive fixed-income, real estate, tactical asset allocation, balanced and short-term manager.

Its value-oriented equity approach is conservative, using tactical asset allocation and sector rotation. It invests only in high-quality securities.

Its fixed-income approach uses interest rate anticipation, with portfolio duration changed in reaction to the forecast. It only invests in high-quality corporate and U.S. government bonds.

Its real estate approach emphasizes conservative, income-producing property.

The asset mix Jan. 1 was 80% stocks, 15% bonds and 5% cash.

The firm follows 50 stocks closely and 200, generally; 20% of research is generated internally.

Barry M. Mendel is chief investment officer and client contact.

Mercantile National Bank of Indiana

5243 Hohman Ave., Hammond, Ind. 46325; (219) 932-8220

Total assets managed	$364,000,000
Total discretionary assets	$248,000,000
Total tax-exempt assets	$101,000,000
Total discretionary tax-exempt	$75,000,000
International equity assets	$4,000,000
International fixed-income	$500,000
Mortgage-backed assets	$1,000,000
401(k)/457 plan assets	$500,000
Tax-exempt clients	118
Types of accounts managed	CFGJ
No. of portfolio managers	1
Size of research staff	1

Mercantile National Bank of Indiana is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value-oriented. Quantitative screening coupled with Graham & Dodd analysis aids in identifying securities selling for less than their intrinsic value. Its fixed-income approach seeks to maximize total return through sector and credit analysis.

The bank follows 40 stocks closely and 100, generally.

The parent is Mercantile Bancorp Inc.

Edward A. Studzinski is chief investment officer; Gary M. Wilbert is client contact.

Mercantile-Safe Deposit & Trust Co.

P.O. Box 2257, Baltimore, Md. 21203; (301) 237-5548

Total assets managed	$6,949,000,000
Total discretionary assets	$6,949,000,000
Total tax-exempt assets	$3,182,000,000
Total discretionary tax-exempt	$3,182,000,000
International fixed-income	$10,000,000
Dedicated/immunized assets	$12,000,000
Mortgage-backed assets	$75,000,000
Types of accounts managed	CEFG
Minimum separate account	$2,000,000
No. of portfolio managers	9
Size of research staff	8

Mercantile-Safe Deposit & Trust Co. is an active equity, active and passive fixed-income, balanced, active international fixed-income and short-term manager.

Its equity approach is value oriented and focuses on high-yield, low p/e securities. Emphasis is placed on the buy/sell discipline. Its risk-control fixed-income approach combines interest rate anticipation and quantitative analysis to achieve specific client objectives.

The asset mix Jan. 1 was 25% stocks, 33% bonds, 40% cash and 2% mortgage-backed securities.

The bank follows 200 stocks closely and 6,000, generally; 50% of research is generated internally.

The parent is Mercantile Bankshares Corp.

James D. Hardesty is chief investment officer; John N. Wetzelberger III is client contact.

The Merchants Bank

1125 Grand Ave., Kansas City, Mo. 64106; (816) 889-8082

Total assets managed	$552,000,000
Total discretionary	$552,000,000
Total tax-exempt assets	$123,000,000
Total discretionary tax-exempt	$123,000,000
Mortgage-backed assets	$19,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	50
Types of accounts managed	CEFJ
Minimum separate account	$500,000
Size of research staff	3

The Merchants Bank is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is a value, low p/e and high-dividend style that is somewhat contrarian. Emphasis is on growth in dividends and earnings, strong balance sheets and return on equity. Its primary fixed-income approach is passive, focusing on interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 20% stocks, 60% bonds, 5% cash and 15% mortgage-backed securities.

The firm follows 50 stocks closely and 500, generally; 25% of research is generated internally.

W. Patrick Sterner is chief investment officer and client contact.

Real estate directory: Sept. 16.

Merchants Capital Management Inc.

1 Merchants Plaza, Suite 660S, Indianapolis, Ind. 46255; (317) 267-3809

Total assets managed	$2,597,000,000
Total discretionary	$2,597,000,000
Total tax-exempt assets	$1,220,000,000
Total discretionary tax-exempt	$1,220,000,000
401(k)/457 assets managed	$12,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	9
Size of research staff	5

Merchants Capital Management Inc. is an active equity, active fixed-income and balanced manager.

For equity selection, it uses a bottom-up approach. Its fixed-income approach uses duration management.

The asset mix Jan. 1 was 40% stocks, 45% bonds and 15% cash.

The firm follows 50 stocks closely and 200, generally. 30% of research is generated internally.

The parent is Merchants National Corp.

Thomas P. Ewbank is chief investment officer; Stephen A. Little is client contact.

Merchants National Bank

222 Second Ave. S.E., Cedar Rapids, Iowa 52401; (319) 368-4354

Total assets managed	$2,007,000,000
Total discretionary	$318,000,000
Total tax-exempt assets	$250,000,000
Total discretionary tax-exempt	$101,000,000
401(k)/457 assets managed	$16,000,000
Tax-exempt clients	59
Types of accounts managed	CEFJ
Minimum separate account	$100,000
No. of portfolio managers	3

Merchants National Bank is an active and passive equity and fixed-income, balanced, passive international equity, tactical asset allocation and short-term manager.

Its equity approach uses common stocks selling at low relative p/es within their market sectors, investing in undervalued equities that are selling at a discount and possess special investment characteristics. For fixed-income, the firm uses systematic laddering of short- to intermediate-term high-grade securities, focusing on the most attractive area of the yield curve.

The asset mix Jan. 1 was 54% stocks, 40% bonds and 6% cash.

The firm follows 60 stocks closely and 997, generally; 10% of the research is generated internally.

The parent is Banks of Iowa Inc.

Dennis R. Haines is chief investment officer; Jodi Pierce is client contact.

Merganser Capital Management Corp.

1 Cambridge Center; Cambridge, Mass. 02142; (617) 494-1000

Total assets managed	$2,364,000,000
Total discretionary	$2,364,000,000
Total tax-exempt assets	$2,290,000,000
Total discretionary tax-exempt	$2,290,000,000
401(k)/457 assets managed	$358,000,000
Tax-exempt clients	19
Types of accounts managed	CFG
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	2

Merganser Capital Management Corp., an active bond and short-term manager, emphasizes capital preservation. Value is added by investing in sectors and securities that offer attractive returns compared with U.S. Government securities on a yield-to-maturity basis.

The asset mix Jan. 1 was 100% bonds.

Edward M. Safran is chief investment officer; James Wakefield is client contact.

Meridian Capital Management Ltd.

450 B St., Suite 780, San Diego, Calif. 92101; (619) 239-9049

Total assets managed	$65,000,000
Total discretionary	$65,000,000
Total tax-exempt assets	$30,000,000
Total discretionary tax-exempt	$30,000,000
International equity assets	$4,000,000
International cash assets	$2,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	38
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	2

Meridian Capital Management Ltd. is an active and passive equity, active and passive fixed-income and balanced manager.

Its equity approach is value-oriented growth. The firm seeks consistent, long-term appreciation with capital preservation. This is achieved by investing in undervalued securities of companies with demonstrated superior earnings and dividend growth. The firm's fixed-income approach uses interest rate anticipation. Options are used sparingly.

The asset mix Jan. 1 was 55% stocks, 15% bonds and 30% cash.

The firm follows 60 stocks closely and 100, generally; 45% of research is generated internally.

Ellis C. Smith is chief investment officer; John D. Messner is client contact.

Meridian Investment Co.

P.O. Box 2000, Valley Forge, Pa. 19482; (215) 251-7955

Total assets managed	$2,200,000,000
Total discretionary	$2,200,000,000
Total tax-exempt assets	$1,490,000,000
Total discretionary tax-exempt	$1,490,000,000
International fixed-income	$120,000,000
Mortgage-backed assets	$242,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	11
Size of research staff	1

Meridian Investment Co. is an active equity and fixed-income, balanced, cash, convertibles and GIC manager.

Its equity approach uses a proprietary value-growth-momentum model that screens 2,500 stocks to provide highly diversified portfolios, matching the S&P 500 profile with market beta and lower volatility. The process is not subjected to growth or value cycles of markets and follows a highly disciplined buy/sell policy.

Its fixed-income approach is based upon the exploitation of inefficiencies. It is characterized by full investment with very active management to enhance or protect capital while maintaining a superior, high-quality income stream.

The asset mix Jan. 1 was 40% stocks, 35% bonds, 5% cash, 16% mortgage-backed securities and 4% convertibles.

The firm follows 2,500 stocks closely; 85% of the research is generated internally.

The parent is Meridian Bancorp.

Philip H. Brown II is chief investment officer; Kenneth L. Holmes is client contact.

Merrill Lynch Asset Management Inc.

P.O. Box 9011, Princeton, N.J. 08543; (609) 282-2000

Total assets managed	$110,038,000,000
Total discretionary	$109,600,000,000
Total tax-exempt assets	$12,970,000,000
Discretionary tax-exempt	$12,770,000,000
Tax-exempt clients	705
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	104
Size of research staff	4

Merrill Lynch Asset Management Inc. is an active domestic and international/global equity and fixed-income, balanced, short-term and mutual fund manager.

Its equity approach is value-oriented, focusing on Graham & Dodd analysis of low p/e, high reinvestment rate companies. Its fixed-income approach emphasizes proper yield curve positioning through interest rate forecasting and yield curve analysis. Credit analysis and bond swaps add value. It prefers intermediate maturity, high-quality issues.

Options are used.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

The firm follows 300 stocks closely; 50% of research is generated internally.

The parent is Merrill Lynch & Co.

Arthur Zeikel is chief investment officer; Daniel J. Goldman is client contact.

Merus Capital Management

475 Sansome St., Suite 1400, San Francisco, Calif. 94111; (415) 291-7467

Total assets managed	$5,468,000,000
Total discretionary	$2,848,000,000
Total tax-exempt assets	$1,055,000,000
Total discretionary tax-exempt	$856,000,000
Tax-exempt clients	20
Types of accounts managed	CFG
Minimum separate account	$1,000,000
No. of portfolio managers	20
Size of research staff	7

Merus Capital Management is an active equity, active fixed-income, balanced and mutual fund manager.

Its equity approach focuses on stocks of high-quality, defensive companies. Historical relative yield is the buy/sell discipline.

Its fixed-income approach adjusts portfolio maturities in response to interest rate forecasts. Movement is directed toward sectors that have the maximum risk-adjusted returns.

The asset mix Jan. 1 was 63% stocks, 28% bonds and 9% cash.

The firm follows 250 stocks closely and 300, generally; 50% of research is generated internally.

The parent is Bank of California.

Harold C. "Tim" Warner is chief investment officer; Christopher D. Knef is client contact.

Mesirow Asset Management

350 N. Clark St., Chicago, Ill. 60610; (312) 670-6023

Total assets managed	$330,000,000
Total discretionary	$330,000,000
Total tax-exempt assets	$150,000,000
Total discretionary tax-exempt	$150,000,000
401(k)/457 assets managed	$50,000,000
Tax-exempt clients	100
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	3

Mesirow Asset Management is an active equity, passive fixed-income and balanced manager.

The firm uses a classical low p/e, value equity approach using a diversified portfolio of recognizable names. It has special expertise in small-cap value management.

Its fixed-income approach uses maturities of no longer than 10 years with at least an A rating.

Stephen G. Gaber is chief investment officer and client contact.

International managers: June 24.

Metric Institutional Realty Advisors

950 Tower Lane, Foster City, Calif. 94404; (415) 378-7000

Total assets managed	$2,057,000,000
Total discretionary	$2,057,000,000
Total tax-exempt assets	$337,000,000
Total discretionary tax-exempt	$337,000,000
Equity real estate assets	$303,000,000
Mortgage assets	$34,000,000
Tax-exempt clients	21
Types of accounts managed	CG
Minimum separate account	$25,000,000
No. of portfolio managers	14
Size of research staff	4

Metric Institutional Realty Advisors, a real estate manager, invests in institutional-grade, garden-style apartment properties in 22 targeted markets identified as having stable demographic, economic, real estate and quality of life environments.

The asset mix Jan. 1 was 90% equity real estate and 10% mortgages.

The parent is Metric Realty, a subsidiary of Metropolitan Life.

Robert A. Fiddaman is chief investment officer and client contact.

Metropolitan Life Insurance

1 Madison Avenue, New York, N.Y. 10010; (212) 578-6409

Total assets managed	$98,300,000,000
Total discretionary assets	$98,300,000,000
Total tax-exempt assets	$51,570,000,000
Discretionary tax-exempt	$51,570,000,000
GICs	$16,700,000,000
Annuities	$10,300,000,000
Equity real estate assets	$1,022,000,000
Mortgage assets	$60,000,000
International equity assets	$73,000,000
International fixed-income	$42,000,000
Equity indexed assets	$596,000,000
Dedicated/immunized assets	$2,935,000,000
Mortgage-backed assets	$24,000,000
401(k)/457 assets managed	$10,100,000,000
Tax-exempt clients	1,363
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	37
Size of research staff	141

Metropolitan Life Insurance Co. is an active and passive equity, active fixed-income, active international equity and fixed-income, balanced, real estate and short-term manager.

Its active equity approach combines fundamental research and price sensitivity, seeking growth and emerging growth stocks. Its fixed-income approach is based on interest rate anticipation. Incremental returns are added through analyses of the bond market, yield spreads, sectors and securities. It uses fixed-income futures.

Its real estate investments focus on high-quality, well-located properties with strong income and excellent appreciation potential. Value is added through innovative, professional property management, portfolio diversification by property type and location, seeking special opportunities and the flexibility to sell at an opportune time.

The separate account asset mix Jan. 1 was 21.1% stocks, 58.6% bonds, 5.9% cash, 12.7% equity real estate, 0.3% mortgage-backed securities and 1.4% international accounts.

The insurer follows 300 stocks closely and 700, generally; 40% of research is generated internally.

Robert E. Chappell Jr. is chief investment officer; C. Robert Henrikson is client contact.

MH & Associates, Securities Management Corp.

21031 Ventura Blvd., Suite 307, Woodland Hills, Calif. 91364; (818) 704-4633

Total assets managed	$46,000,000
Total discretionary	$30,000,000
Total tax-exempt assets	$31,000,000
Total discretionary tax-exempt	$24,000,000
International bonds	$1,000,000
Mortgage-backed assets	$1,000,000
Tax-exempt clients	19
Types of accounts managed	CEF
No. of portfolio managers	2

MH & Associates, Securities Management Corp. is a balanced manager.

Its equity approach is top-down asset allocation and sector emphasis. Low p/e, underresearched and institutionally underowned stocks with market capitalization of less than $1 billion are stressed. It uses interest rate anticipation for fixed income.

The asset mix Jan. 1 was 36% stocks, 40% bonds and 30% cash.

The firm follows 100 stocks closely and 200, generally; 80% of research is generated internally.

J. Robert Meichelbock is chief investment officer; John Heilman is client contact.

M&I Investment Management

770 N. Water St., Milwaukee, Wis. 53202; (414) 765-7770

Total assets managed	$4,198,000,000
Total discretionary	$3,574,000,000
Total tax-exempt assets	$1,935,000,000
Total discretionary tax-exempt	$1,935,000,000
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	20
Size of research staff	3

M&I Investment Management Corp. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented. Emphasis is placed on medium- to large-cap companies exhibiting strong financial characteristics. Growth com-

panies selling below their average p/e ratios and companies selling at discounts to their intrinsic values are stressed.

In fixed-income, the firm actively manages intermediate-term bonds. Emphasis is placed on interest rate anticipation and sector analysis within the context of total return.

The asset mix Jan. 1 was 32.3% stocks, 44.5% bonds, 18.8% cash and 4.4% miscellaneous.

The firm follows 200 stocks closely; 50% of the research is generated internally.

The parent is Marshall & Ilsley Corp.

William J. Gumerman is chief investment officer; Judith C. Murphy is client contact.

MIG Realty Advisors Inc.

1645 Palm Beach Lakes Blvd., Suite 600, West Palm Beach, Fla. 33401; (407) 686-1800

Total assets managed	$1,132,000,000
Total discretionary	$513,000,000
Total tax-exempt assets	$1,132,000,000
Total discretionary tax-exempt	$513,000,000
Equity real estate assets	$513,000,000
Tax-exempt clients	14
Types of accounts managed	CG
Minimum separate account	$15,000,000
No. of portfolio managers	3
Size of research staff	6

MIG Realty Advisors Inc., a real estate manager, invests in mature and developmental institutional-grade apartment complexes in 20 markets throughout the United States. It also specializes in adding value to problem/workout portfolios.

As of Jan. 1, all assets were in equity real estate.

Larry E. Wright is chief investment officer; James A. Cote is client contact.

Miller, Anderson & Sherrerd

1 Tower Bridge, West Conshohocken, Pa. 19428; (215) 940-5100

Total assets managed	$20,310,000,000
Total discretionary	$20,310,000,000
Total tax-exempt assets	$19,700,000,000
Discretionary tax-exempt	$19,700,000,000
International equity assets	$134,000,000
International fixed-income	$266,000,000
Mortgage-backed assets	$2,867,000,000
401(k)/457 assets managed	$23,000,000
Tax-exempt clients	137
Types of accounts managed	CEFGJ
Minimum separate bond account	$20,000,000
Minimum equity account	20,000,000
Minimum balanced account	$35,000,000
No. of portfolio managers	15
Size of research staff	8

Miller, Anderson & Sherrerd is an active domestic and international equity and fixed-income, balanced and short-term manager.

Its equity approach focuses on a disciplined valuation process and investment strategy that combines fundamental, quantitative analytical techniques, low p/e stocks and sector rotation.

Its fixed-income approach encompasses definition of benchmark duration range, maturity/duration management, yield curve analysis and sector/security selection. Securities are used to reduce overall portfolio risk, provide a real rate of return and protect against disinflation. It uses financial futures.

The asset mix Jan. 1 was 34.5% stocks, 47.8% bonds, 3.1% cash and 14.6% mortgage-backed securities.

The firm follows 150 stocks closely and 350, generally; 50% of the research is generated internally.

Richard B. Worley is managing partner; Glenn E. Becker is client contact.

MIMLIC Asset Management

400 N. Robert St., St. Paul, Minn. 55101; (612) 298-3826

Total assets managed	$5,632,000,000
Total discretionary assets	$5,116,000,000
Total tax-exempt assets	$116,000,000
Total discretionary tax-exempt	$116,000,000
Tax-exempt clients	12
Types of accounts managed	CF
Minimum separate account	$5,000,000
No. of portfolio managers	11
Size of research staff	10

MIMLIC Asset Management Co. is an active and passive equity and fixed-income, balanced, real estate and short-term manager.

Its equity approach is value based with a growth orientation. Fundamental analysis is used to identify sound companies whose stock prices do not reflect long-term growth potential. Its fixed-income strategy internally generates privately placed fixed-income investments.

The separate account asset mix Jan. 1 was 54% stocks, 41% bonds and 5% cash.

The insurer follows 125 stocks closely and 175, generally; 50% of research is generated internally.

The parent is The Minnesota Mutual Life Insurance Co.

Joseph R. Bird is chief investment officer; Jeffrey D. Anderson is client contact.

Minton Investment Management

650 Sentry Parkway, Suite 1, Blue Bell, Pa. 19422; (215) 940-0695

Total assets managed	$568,000,000
Total discretionary	$568,000,000
Total tax-exempt assets	$568,000,000
Total discretionary tax-exempt	$568,000,000
Fixed-income indexed assets	$71,000,000
Dedicated/immunized assets	$497,000,000
401(k)/457 assets managed	$34,000,000
Tax-exempt clients	17
Types of accounts managed	CJ
No. of portfolio managers	3
Size of research staff	1

Minton Investment Management is a structured and indexed fixed-income manager.

It specializes in the active management of structured portfolios designed to meet predetermined client-specified indexes. An intermediate reserve strategy with higher yield than money market funds but without bond market volatility is offered.

All assets as of Jan. 1 were in bonds.

Lee W. Minton is chief investment officer.

Mississippi Valley Advisors

1 Mercantile Center, Suite 1200. P.O. Box 387, St. Louis, Mo. 63166; (214) 425-1234

Total assets managed	$4,150,000,000
Total discretionary	$4,000,000,000
Total tax-exempt assets	$4,150,000,000
Total discretionary tax-exempt	$4,000,000,000
Equity real estate assets	$5,000,000
International equity assets	$5,000,000
Equity indexed assets	45,000,000
Dedicated/immunized assets	$950,000,000
Tax-exempt clients	170
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	11
Size of research staff	8

Mississippi Valley Advisors Inc. is an active and passive equity, active fixed-income, real estate, balanced and short-term manager.

Its primary equity approach is broadly diversified core equities. Fundamental research is employed using a valuation model and screens comparing historical relative price-to-book ratios, estimated total earnings over one and three years based on projected corporate earnings and relative p/es, and its dividend discount model.

Its fixed-income approach provides enhanced value and sector allocation based on quantitative spread analysis as well as internal credit research.

The firm follows 300 stocks closely and 1,000, generally; 50% of research is generated internally.

The parent is Mercantile Bank of St. Louis.

John H. Blixen II is chief investment officer; Randall L. Kirkland is client contact.

Mitchell Capital Management

4350 Shawnee Mission Parkway, Suite 124, Fairway, Kan. 66205; (913) 262-3394

Total assets managed	$70,000,000
Total discretionary	$70,000,000
Total tax-exempt assets	$29,000,000
Total discretionary tax-exempt	$29,000,000
Mortgage assets	$1,000,000
Tax-exempt clients	9
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

Mitchell Capital Management Co. is an active and passive equity, active and passive fixed-income and balanced manager.

Its two-phase equity approach uses quantitative models that generate a listing of attractive equities, while traditional investment analysis confirms the return potential of model stocks.

Its fixed-income approach follows general economic trends to identify future interest rate movements, and identifies opportunities arising from rate movements within and between various sectors.

The asset mix Jan. 1 was 42.5% stocks, 46% bonds, 9.5% cash and 2% mortgage-backed securities.

The firm follows 40 stocks closely and 75, generally; 50% of the research is generated internally.

Fred Mitchell is chief investment officer and client contact.

The Mitchell Group Inc.

1100 Louisiana, Suite 4810, Houston, Texas 77002; (713) 759-2070

Total assets managed	$10,000,000
Total discretionary	$10,000,000
Total tax-exempt assets	$5,000,000
Total discretionary tax-exempt	$5,000,000
Tax-exempt clients	1
Types of accounts managed	G
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	2

The Mitchell Group Inc., an active energy equity manager, focuses exclusively on energy/alternate energy equities. Its approach features top-down energy sector analysis and weightings with bottom-up stock selection using fundamental analysis.

The asset mix Jan. 1 was 90% equities and 10% cash.

The firm follows 50 stocks closely and 150, generally; 75% of research is generated internally.

Rodney B. Mitchell is chief investment officer; Scott M. Harrington is client contact.

Mitchell Hutchins

1285 Avenue of the Americas, New York, N.Y. 10019; (212) 713-4000

Total assets managed	$30,152,000,000
Total discretionary	$28,827,000,000
Total tax-exempt assets	$9,468,000,000
Total discretionary tax-exempt	$9,282,000,000
Mortgage assets	$381,000,000
International fixed-income	$34,000,000
Equity indexed assets	$100,000,000
Fixed-income indexed assets	$731,000,000
Dedicated/immunized assets	$1,090,000,000
Mortgage-backed assets	$456,000,000
401(k)/457 assets managed	$9,000,000
Tax-exempt clients	338
Types of accounts managed	CEFGJ
No. of portfolio managers	39
Size of research staff	6

Mitchell Hutchins is an active and passive domestic and international equity and fixed-income, balanced, venture capital and short-term manager.

Its equity approaches include growth, small-cap and low p/e stocks and quantitative analysis. Its fixed-income approach uses interest rate anticipation. Options and financial futures are used.

The asset mix Jan. 1 was 24% stocks, 45% bonds, 19% cash, 4% mortgages, 5% mortgage-backed securities and 3% venture capital.

The parent is PaineWebber Inc.

Stephen E. Canter is chief investment officer; Sallie E. Proctor is client contact.

Montag & Caldwell Inc.

2 Piedmont Center, Suite 500, Atlanta, Ga. 30363-2401; (404) 262-3480

Total assets managed	$827,000,000
Total discretionary	$807,000,000
Total tax-exempt assets	$607,000,000
Total discretionary tax-exempt	$607,000,000
Mortgage-backed assets	$17,000,000
401(k)/457 assets managed	$16,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	3

Montag & Caldwell Inc. is an active equity, active fixed-income and balanced manager.

For equities, it takes a bottom-up valuation approach that interrelates earnings momentum. Its fixed-income approach is based on duration management, maximizing the probability of outperforming the market within an expected range of rate movement by adjusting maturity, coupon and issuer.

The asset mix Jan. 1 was 56% stocks, 35% bonds, 7% cash and 2% mortgage-backed securities.

The firm follows 300 stocks closely and 800 generally.

Ronald E. Canakaris is chief investment officer; Homer W. Whitman Jr. is client contact.

P&I examines cross-border financing in the May 27 issue.

Montgomery Asset Management

600 Montgomery St., 17th Floor, San Francisco, Calif. 94111; (415) 627-2400

Total assets managed	$125,000,000
Total discretionary	$125,000,000
Total tax-exempt assets	$125,000,000
Total discretionary tax-exempt	$125,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	6
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	2

Montgomery Asset Management, an active equity manager, seeks growth and small-cap stocks. It uses a bottom-up, fundamental process based on in-depth research. The firm focuses on early recognition of companies whose growth potential is not reflected in the stock price.

The asset mix Jan. 1 was 90% stock and 10% cash.

The firm follows 200 stocks closely and 3,000, generally; 25% of research is generated internally.

The parent is Montgomery Securities.

Stu Roberts is chief investment officer; Mark B. Geist is client contact.

Moran Asset Management

41 W. Putnam Ave., Greenwich, Conn. 06830; (203) 869-5100

Total assets managed	$334,000,000
Total discretionary	$334,000,000
Total tax-exempt assets	$220,000,000
Total discretionary tax-exempt	$220,000,000
Tax-exempt clients	59
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	8

Moran Asset Management, an active equity manager, invests in companies with superior fundamental strengths that are medium size, established, successful and growing, where equity securities are substantially undervalued on a real asset value basis.

The asset mix Jan. 1 was 95% stocks, 1% bonds and 4% cash.

Frederick A. Moran is chief investment officer; David E. Kaplan and Patrick Sheehan are client contacts.

Morgan Grenfell Capital Management Inc.

885 Third Ave., Suite 1740, New York, N.Y. 10022; (212) 230-2600

Total assets managed	$1,460,000,000
Total discretionary	$1,460,000,000
Total tax-exempt assets	$1,034,000,000
Total discretionary tax-exempt	$1,034,000,000
Mortgage-backed assets	$130,000,000
Tax-exempt clients	33
Types of accounts managed	CEFGJ
Minimum separate equity account	$10,000,000
Minimum separate bond account	$25,000,000
No. of portfolio managers	8

Morgan Grenfell Capital Management Inc. is an active equity and active fixed-income manager.

Its equity approach focuses on small-cap stocks ($50 million to $500 million). The firm identifies undervalued emerging growth companies using a bottom-up approach combined with a top-down approach to selecting economic sectors.

Its fixed-income approach focuses on exploiting inefficiencies across all investment-grade bonds. Value is added through issue selection and trading.

Its asset mix Jan. 1 was 74% stocks, 13% bonds and 13% mortgage-backed securities.

The firm follows 850 stocks closely and 1,800, generally; 80% of research is generated internally.

The parent is Morgan Grenfell Asset Management Ltd.

Chief investment officers are Robert E. Kern for equities and David W. Baldt for bonds; the client contact is James E. Minnick.

Morgan Grenfell Investment Services Ltd.

20 Finsbury Circus, London, U.K. EC2 M1NB; (071) 256-7500

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Advanced Investment Management

For more information, contact:
Dave Mathews
(412) 762-6369

Two Oliver Plaza • Suite 2020 • Pittsburgh, Pennsylvania 15222

Total assets managed	$2,668,000,000
Total discretionary	$2,668,000,000
Total tax-exempt assets	$2,191,000,000
Total discretionary tax-exempt	$2,191,000,000
International equity assets	$1,915,000,000
International fixed-income	$276,000,000
Tax-exempt clients	33
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	10
Size of research staff	19

Morgan Grenfell Investment Services Ltd. is an active international/global/regional equity and fixed-income manager.

For equities it takes a bottom-up approach with emphasis on stock selection. Market allocation and currency analysis are secondary. Emphasis is on growth stocks. Its fixed-income approach combines active management of currencies, bond markets and issues. Currency and bond market exposure decisions are separated through currency hedging in the forward and currency options markets. Bond market and issue selection are separated through the use of international bond futures.

The asset mix Jan. 1 was 82% stocks, 13% bonds and 5% cash.

The firm follows 850 stocks closely and 3,000 generally; 80% of research is generated internally.

The parent is Morgan Grenfell Asset Management Ltd.

Michael Bullock is chief investment officer; James E. Minnich is client contact.

J.P. Morgan Investment Management Inc.

522 Fifth Ave., New York, N.Y. 10036; (212) 837-2300

Total assets managed	$62,665,000,000
Total discretionary	$62,665,000,000
Total tax-exempt assets	$42,849,000,000
Discretionary tax-exempt	$42,849,000,000
Equity real estate assets	$2,007,000,000
Mortgage assets	$2,163,000,000
International equity assets	$1,437,000,000
International fixed-income	$1,740,000,000
Dedicated/immunized assets	$6,756,000,000
Mortgage-backed assets	$4,291,000,000
Tax-exempt clients	500
Types of accounts managed	CEFGJ
No. of portfolio managers	50
Size of research staff	35

J.P. Morgan Investment Management Inc. is an active domestic and international equity and fixed-income, balanced, real estate, short-term, tactical asset allocation, immunized fixed-income, currency hedging, portfolio protection, oil and gas and convertibles manager.

Its equity approach is a focused internal analytical effort combined with disciplined valuation and portfolio construction. Stock selection is most important. In fixed-income, in addition to interest rate anticipation, the firm employs extended markets along with sector and yield spread analyses to provide incremental return and lower volatility. It uses options and financial futures.

Its real estate approach is to make direct investments in special situations that provide high current income, cash flow growth potential and high residual property appreciation.

The firm runs $6.5 billion in currency overlay, tactical asset allocation, portfolio protection and tactical duration management strategies. Of the underlying assets, $3.16 billion is managed internally; the balance is not reflected in the assets listed above.

The asset mix Jan. 1 was 29% stocks, 33% bonds, 10% cash, 5% equity real estate, 5% mortgages, 10% mortgage-backed securities, 3% international equities, 4% international bonds and 1% convertibles.

The firm follows 900 stocks closely; 80% of research is generated internally.

The parent is J.P. Morgan & Co.

David L. Brigham is chief investment officer; John R. Thomas is client contact.

Morgan Stanley Asset Management

1221 Avenue of the Americas, 21st Floor, New York, N.Y. 10020; (212) 296-7179

Total assets managed	$29,297,000,000
Total discretionary	$18,344,000,000
Total tax-exempt assets	$15,116,000,000
Discretionary tax-exempt	$15,116,000,000
International equity assets	$1,982,000,000
International fixed-income	$107,000,000
401(k)/457 assets managed	$8,431,000,000
Tax-exempt clients	315
Types of accounts managed	CEFGJ
Minimum separate equity account	$10,000,000
Minimum separate bond account	$50,000,000
No. of portfolio managers	31

Morgan Stanley Asset Management is an active domestic and international equity and fixed-income, passive international equity, balanced, short-term, high yield bond and emerging growth stock manager.

Its primary equity approach combines market sector allocation with a growth and value-oriented selection process. Top-down and bottom-up elements are used. Its fixed-income approach concentrates on active maturity shifting, with short- and intermediate-term holdings comprising the portfolio core. Long-term bonds are used opportunistically.

In addition to the assets above, the firm is fiduciary for $10.953 billion in tax-exempt assets.

The asset mix Jan. 1 was 37% stocks, 54.5% bonds and 8.5% cash.

The firm follows 110 stocks closely and 250, generally; 30% of the research is generated internally.

The parent is Morgan Stanley Group Inc.

Barton M. Biggs is chief investment officer; Patricia A. Patterson is client contact.

Post-1992 Europe: Oct. 28.

Morgan Stanley Asset Management/The Chicago Group

440 S. LaSalle St., Chicago, Ill. 60605; (312) 765-6104

Total assets managed	$971,000,000
Total discretionary	$971,000,000
Total tax-exempt assets	$876,000,000
Total discretionary tax-exempt	$876,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	58
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	3

Morgan Stanley Asset Management/The Chicago Group is an active equity and balanced manager.

Its equity approach is classic value investing, seeking companies selling at less than the firm's research indicates to be their true worth. This results in portfolios with high yields, low p/es and low prices to book. Quantitative work endeavors to best define a company's fundamental value. Its balanced funds integrate the value strategies in the equity selection, bond selection and asset allocation. Each of these strategies emphasizes doing well in difficult markets, as well as providing superior performance over a market cycle.

The asset mix Jan. 1 was 40% stocks, 56% bonds and 4% cash.

The firm follows 125 stocks closely and 500, generally; 90% of the research is generated internally.

Thomas S. White Jr. is chief investment officer; Stephen C. Sexauer is client contact.

Morguard Investments Ltd.

1027 Yonge St., Suite 300, Toronto, Ontario M4W 3E8; (416) 967-0880

Total assets managed	$1,450,000,000
Total discretionary	$1,450,000,000
Total tax-exempt	$1,450,000,000
Total discretionary tax-exempt	$1,450,000,000
Equity real estate assets	$1,450,000,000
Tax-exempt clients	34
Types of accounts managed	CG
Minimum separate account	$5,000,000

Morguard Investments Ltd., a Canadian firm, is a real estate manager.

It acquires or develops only high-quality, income-producing properties suitable for pension fund investment. Assets are diversified by property type and location. While the firm aggressively pursues above-average returns from its investments, its primary concern is the safe-guarding of assets.

All assets were in equity real estate Jan. 1.

Its parent is Metropolitan Life.

A.K. "Tony" Stephens is chief investment officer; W.A. "Tony" Houghton is client contact.

Morley Capital Management

5285 S.W. Meadows Road, Suite 400, Lake Oswego, Ore. 97035; (503) 635-5414

Total assets managed	$5,233,000,000
Total discretionary	$5,233,000,000
Total tax-exempt assets	$5,233,000,000
Total discretionary tax-exempt	$5,233,000,000
401(k)/457 assets managed	$3,500,000,000
Tax-exempt clients	60
Types of accounts managed	CEFGJ
Minimum separate account	$25,000,000
No. of portfolio managers	5
Size of research staff	5

Morley Capital Management Inc., a GIC manager, seeks to provide a predictable maximum rate of return while preserving the safety of capital and avoiding market risk.

The parent is Morley Financial Services Inc.

Kenneth D. Johnson is chief investment officer; Joanne Burdic is client contact.

Morse, Williams & Co.

230 Park Ave., New York, N.Y. 10169; (212) 207-1600

Total assets managed	$272,000,000
Total discretionary	$272,000,000
Total tax-exempt assets	$60,000,000
Total discretionary tax-exempt	$60,000,000
Tax-exempt clients	19
Types of accounts managed	CEF

Morse, Williams & Co. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach focuses on growth and emerging growth stocks, emphasizing strong growth fundamentals, exceptional niche/industry positions, proven management and profitability.

In fixed-income, it emphasizes high-grade corporate and U.S. government securities, with some investment-grade issues used when appropriate. Maturities are laddered.

The asset mix Jan. 1 was 58% stocks, 34% bonds and 8% cash.

The firm follows 100 stocks closely and 150, generally; 35% of the research is generated internally.

Robert P. Morse is chief investment officer; David B. Roosevelt is client contact.

Mosa Capital Management

3 Moonshadow, Irvine, Calif. 92715; (714) 854-8792

Total assets managed	$9,000,000
Total discretionary	$9,000,000
Total tax-exempt assets	$3,000,000
Total discretionary tax-exempt	$3,000,000
International equity assets	$50,000
International bond assets	$50,000
Mortgage-backed assets	$30,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$200,000
No. of portfolio managers	1
Size of research staff	1

Mosa Capital Management Inc. is an active domestic and international equity and fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is bottom-up, using fundamental and technical analysis to select domestic and foreign stocks of growth companies with low debt and good profit history. Options are used.

Its fixed-income approach uses interest rate anticipation and Treasury notes.

The asset mix Jan. 1 was 28% stocks, 7% bonds, 60% cash and 1% mortgage-backed securities.

The firm follows 100 stocks closely and 300, generally; all research is generated internally.

Ram S. Vazirani is chief investment officer and client contact.

Mt. Auburn Management

79 Milk St., Boston, Mass. 02109; (617) 423-7707

Total assets managed	$51,000,000
Total discretionary	$51,000,000
Total tax-exempt assets	$45,000,000
Total discretionary tax-exempt	$45,000,000
Tax-exempt clients	3
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	1

Mt. Auburn Management, an active growth equity manager, constructs extremely concentrated portfolios. It chooses companies from select industries, with market capitalizations from $500 million to $5 billion and that innovate or respond to external change.

The asset mix Jan. 1 was 91% stocks and 9% cash.

Alan J. Dworsky is chief investment officer and client contact.

Mount Lucas Management

100 Palmer Square, Fifth Floor, CN 190, Princeton, N.J. 08542; (609) 924-8868

Total assets managed	$296,000,000
Total discretionary	$296,000,000
Total tax-exempt assets	$279,000,000
Total discretionary tax-exempt	$279,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	4

Mount Lucas Management Corp., a managed futures manager, invests in a broad portfolio of futures contracts using a diverse set of trading approaches.

The asset mix Jan. 1 was 100% managed futures.

Frank L. Vannerson is chief investment officer; Grant W. Schaumburg Jr. is client contact.

MPT Associates Inc.

630 Fifth Ave., New York, N.Y. 10111; (212) 247-5858

Total assets managed	$1,274,000,000
Total discretionary	$1,274,000,000
Total tax-exempt assets	$1,061,000,000
Total discretionary tax-exempt	$1,061,000,000
Mortgage-backed assets	$5,000,000
Tax-exempt clients	24
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

MPT Associates Inc. is an active equity, active fixed-income, balanced and South African-free manager.

The firm uses quantitative strategies to manage diversified, fully invested equity portfolios. Multifactor valuation models are employed for security appraisals, using objective data. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 93% stocks, 5% fixed-income and 2% cash.

The parent company is Lincoln National Corp.

Craig J. Lazzara is chief investment officer; F. Allen Dudley is client contact.

MSR Advisors

80 Maiden Lane, 19th Floor, New York, N.Y. 10038; (212) 422-8040

Total assets managed	$266,000,000
Total discretionary	$266,000,000
Total tax-exempt assets	$29,000,000
Total discretionary tax-exempt	$29,000,000
Tax-exempt clients	3
Types of accounts managed	CFG
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	2

MSR Advisors is an active equity and active fixed-income manager.

The firm uses a proprietary technical approach to stock selection based on mathematical study of price movement patterns of S&P 500 stocks. Its fixed-income approach uses anticipatory timing based on price cyclicality of Treasuries.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 500 stocks closely; all research is generated internally.

The parent is Piedmont Management Co. of New York.

Frank A. Peluso is chief investment officer; John D. Mathai is client contact.

MT Associates

22 Front St. W., Toronto, Ontario M5J 1C4; (416) 860-0616

Total assets managed	$2,519,000,000
Total discretionary	$2,421,000,000
Total tax-exempt	$2,267,000,000
Total discretionary tax-exempt	$2,267,000,000
Mortgage assets	$19,000,000
Non-North American equities	$70,000,000
Equity indexed assets	$7,000,000
Dedicated/immunized assets	$101,000,000
Tax-exempt clients	142
Types of accounts managed	C
No. of portfolio managers	11
Size of research staff	2

MT Associates, a Canadian firm, is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Its equity approach is disciplined and value-oriented, using proprietary screens and systems as well as extensive internal research to identify undervalued stocks. Its fixed-income approach uses a low-risk, duration-based strategy combined with active exploitation of market inefficiencies.

It follows 100 stocks closely and 250, generally; 80% of research is generated internally.

The parent is Montreal Trust.

Alex Wilson is chief investment officer; S. Keith Lupton is client contact.

MTH Asset Management

331 Madison Ave., New York, N.Y. 10017; (212) 370-0040

Total assets managed	$76,000,000
Total discretionary	$76,000,000
Total tax-exempt assets	$76,000,000
Total discretionary tax-exempt	$76,000,000
Equity indexed assets	$76,000,000
Tax-exempt clients	2
Types of accounts managed	CF
Minimum separate account	$50,000,000
No. of portfolio managers	1
Size of research staff	2

MTH Asset Management, an equity index enhancement manager, creates portfolios of a "synthetic long" position in S&P 100 Index options combined with actual positions in the 400 stocks in the S&P 500 that aren't in the S&P 100. Options and stock index futures are used.

All assets were in stocks Jan. 1.

The firm follows 500 stocks closely and 500, generally.

The parent is Miller Tabak Hirsch & Co.

Albert Slawsky is chief investment officer; John Reynolds is client contact.

Mu-Cana Investment Counselling Ltd.

227 King St. S., Waterloo, Ontario N2J 4C5; (519) 888-2750

Total assets managed	$5,403,000,000
Total discretionary	$5,403,000,000
Total tax-exempt	$4,230,000,000
Total discretionary tax-exempt	$4,230,000,000
For subsidiaries of U.S. firms	$391,000,000
Dedicated/immunized assets	$80,000,000
Mortgage-backed assets	$100,000,000
Tax-exempt clients	121
U.S. subsidiaries	22
Types of accounts managed	CEFGU
Minimum separate account	$8,000,000
No. of portfolio managers	9
Size of research staff	2

Mu-Cana Investment Counselling Ltd., a Canadian firm, is an active equity, active fixed-income and balanced manager.

Its equity approach is value oriented, emphasizing low p/e stocks and Graham & Dodd analysis. For fixed income, interest rate anticipation is used.

The asset mix Jan. 1 was 38% Canadian stocks, 7% U.S. stocks, 48% bonds, 5% cash and 2% mortgage-backed securities.

The parent is Mutual Life of Canada.

H.E. Brough is chief investment officer; David M. Paleczny is client contact.

Munder Capital Management

260 E. Brown St., Suite 100, Birmingham, Mich. 48009; (313) 647-9200

Total assets managed	$2,373,000,000
Total discretionary	$2,373,000,000
Total tax-exempt assets	$2,018,000,000
Total discretionary tax-exempt	$2,018,000,000
Tax-exempt clients	117
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	2

Munder Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes demonstrated growth, low p/es and financially stable balance sheets in a bottom-up, disciplined style to identify companies with superior fundamental and value characteristics to the market.

In fixed income, it uses active and quantitative methodologies that analyze effective duration, convexity, sectors and the yield curve.

The asset mix Jan. 1 was 45% stocks, 42% bonds, 11% cash and 2% convertible securities.

The firm follows 400 stocks closely and 5,000, generally; 85% of research is generated internally.

Lee Munder is chief investment officer; Elyse Essick is client contact.

Murray Johnstone International Ltd.

875 N. Michigan Ave., Suite 3415, Chicago, Ill. 60611; (312) 951-5995

Total assets managed	$315,000,000
Total discretionary	$315,000,000
Total tax-exempt assets	$297,000,000
Total discretionary tax-exempt	$297,000,000
International equity assets	$222,000,000
International fixed-income	$8,000,000
International cash assets	$67,000,000
Tax-exempt clients	19
Types of accounts managed	CFG
Minimum separate account	$5,000,000
No. of portfolio managers	10

Murray Johnstone International Ltd. is an active international and regional equity and fixed-income manager.

Its equity approach begins with macroeconomic evaluation, leading to country allocation. Security selection is based on a long-term, value-oriented approach.

Its fixed-income approach uses interest rate anticipation. Appropriate country allocation and duration structures are determined, but final selection focuses on bond quality.

The asset mix Jan. 1 was 74% stocks, 3% bonds and 23% cash.

The firm follows 500 stocks closely and 5,000, generally; 60% of research is generated internally.

The parent is Murray Johnstone Ltd.

Gavin Dobson and Michael Parlett are chief investment officers; Bill Daniels and Sue Mullin are client contacts.

Mutual of America Life Insurance Co.

666 Fifth Ave., New York, N.Y. 10103; (212) 399-1600

Total assets managed	$5,274,000,000
Total discretionary assets	$5,274,000,000
Total tax-exempt assets	$5,274,000,000
Total discretionary tax-exempt	$5,274,000,000
GICs	$147,000,000
Mortgage assets	$122,000,000
International equity assets	$23,000,000
Mortgage-backed assets	$757,000,000
401(k)/457 assets managed	$98,000,000
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	6
Size of research staff	6

Mutual of America Life Insurance Co. is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes companies with a value orientation. Its fixed-income approach focuses on active management relative to shifting yield profiles, market sector relationships and economic trends. It uses options.

The separate account asset mix Jan. 1 was 50% stocks, 34% bonds and 16% cash.

The insurer follows 150 stocks closely and 300, generally; 50% of research is generated internally.

Joan M. Casson and Thomas J. Verage are chief investment officers; Thomas J. Moran is client contact.

Mutual Benefit Life Insurance Co.

520 Broad St., Newark, N.J. 07102; (201) 481-8600

Total assets managed	$13,094,000,000
Total discretionary assets	$13,094,000,000
Total tax-exempt assets	$5,732,000,000
Total discretionary tax-exempt	$5,732,000,000
GICs	$1,370,000,000
Annuities	$198,000,000
401(k)/457 assets managed	$289,000,000
Tax-exempt clients	2,134
Types of accounts managed	CEFG
Minimum separate account	$30,000,000
No. of portfolio managers	9
Size of research staff	20

Mutual Benefit Life Insurance Co. is an active equity, active fixed-income, real estate and short-term manager.

Its equity approach follows Graham & Dodd principles. It seeks oversold, underfollowed and undervalued issues. Its fixed-income approach uses immunization. It is primarily concerned with the highest after-tax yield and matching of asset liability and maturity. Fixed-income futures are used.

Its real estate approach is to obtain smaller properties that are diversified by type and location to afford a greater degree of diversity.

The separate account asset mix Jan. 1 was 81% stocks, 15% cash and 4% equity real estate.

The insurer follows 100 stocks closely and 400, generally; 90% of research is generated internally.

Donald F. Haller Jr. is chief investment officer; Michael K. Farrell is client contact.

Mutual of New York (MONY)

4 Manhattanville Road, Purchase, N.Y. 10577; (914) 697-8000

Total assets managed	$21,132,000,000
Total discretionary	$21,132,000,000
Total tax-exempt assets	$7,524,000,000
Total discretionary tax-exempt	$7,524,000,000
Equity real estate assets	$36,000,000
401(k)/457 assets managed	$1,000,000,000
Tax-exempt clients	1,086
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	12
Size of research staff	25

Mutual of New York (MONY) is an active domestic and international equity, active fixed-income, balanced, real estate, short-term, tactical asset allocation and timber manager.

Its equity approach is value-oriented, seeking long-term growth of capital through investments in stocks with above-average dividend yields. Its fixed-income approach uses credit and sector analysis, adjusting duration based on spreads along the yield curve and its perception of secular trends

in the market.

Its real estate approach is to invest in properties that provide a favorable cash return and significant appreciation in value to obtain a maximum level of income and to protect principal against credit loss.

In addition to the assets above, discretionary tax-exempt assets of $1.9678 billion are passed to external managers.

The asset mix Jan. 1 was 48.2% stocks, 23.9% bonds, 16.4% cash, 2.6% equity real estate and 8.9% timber.

It follows 250 stocks closely and 500, generally; 51% to 75% of research is generated internally.

Kenneth M. Levine is chief investment officer; Gary E. Linsberry is client contact.

N

Nakagama & Wallace Investment Management

74 Trinity Place, New York, N.Y. 10006; (212) 962-4100

Total assets managed	$7,000,000
Total discretionary	$7,000,000
Total tax-exempt assets	$2,000,000
Total discretionary tax-exempt	$1,000,000
401(k)/457 assets managed	$100,000
Tax-exempt clients	3
Types of accounts managed	CF
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	1

Nakagama & Wallace Investment Management is an active equity, active fixed-income and balanced manager.

Its equity approach is top-down value. Portfolios emphasize out-of-favor sectors that are most promising economically and financially; interindustry developments and market psychology also contribute to sector emphasis.

Its fixed-income approach is based on interest rate anticipation. Using high-quality securities, it positions the portfolio and adjusts term structure in line with the economic and interest-rate outlook.

The asset mix Jan. 1 was 68% stocks, 31% bonds and 1% cash.

The parent is Nakagama & Wallace Inc.

John C. Sutherland is chief investment officer; William G. Greenbaum is client contact.

Narragansett Capital Inc.

50 Kennedy Plaza, Providence, R.I. 02903; (401) 751-1000

Total assets managed	$450,000,000
Total discretionary	$450,000,000
Total tax-exempt assets	$165,000,000
Total discretionary tax-exempt	$165,000,000
Tax-exempt clients	15
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	5

Narragansett Capital Inc. is an equity manager in leveraged buy-outs, taking equity positions in transactions made by the firm.

Arthur D. Little, Gregory P. Barber, Jonathan M. Nelson and Roger A. Vandenberg are chief investment officers; Mr. Little is client contact.

National Bank of Commerce

13th and O Streets, Lincoln, Neb. 68508; (402) 434-4419

Total assets managed	$617,000,000
Total discretionary	$505,000,000
Total tax-exempt assets	$172,000,000
Total discretionary tax-exempt	$146,000,000
Equity real estate assets	$7,000,000
International equity assets	$7,000,000
Tax-exempt clients	147
Types of accounts managed	CEFJ
No. of portfolio managers	7
Size of research staff	6

National Bank of Commerce is an active domestic and international/global equity and fixed-income, balanced, short-term and GIC fund manager.

Its equity approach emphasizes emerging growth and value stocks with positive earnings momentum, low p/e multiples and positive stock momentum. Its fixed-income approach involves a complete economic analysis and anticipation of inflation trends. It seeks quality and uses interest rate anticipation.

The asset mix Jan. 1 was 32.9% stocks, 45.2% bonds, 14.5% cash, 5% equity real estate, 0.1% mortgages and 2.3% other.

The firm follows 25 stocks closely and 50, generally; 60% of research is generated internally.

The parent is First Commerce Bancshares.

Keith L. Broman is chief investment officer; Douglas M. Laird is client contact.

National City Bank

P.O. Box 5756, Cleveland, Ohio 44101-0756; (216) 575-2000

Total assets managed	$8,154,000,000
Total discretionary assets	$6,523,000,000
Total tax-exempt assets	$3,513,000,000
Total discretionary tax-exempt	$2,810,000,000
Types of accounts managed	EFJ
Minimum separate account	$500,000
No. of portfolio managers	14
Size of research staff	10

National City Bank is an active equity, active fixed-income, GIC, short-term and balanced manager.

Its primary equity approach focuses on a company's market, competitive advantage, management, return on equity and consistent, rather than cyclical, earnings growth. In fixed income, maturity structures of portfolios are adjusted minimally in anticipation of interest rate changes with sector strategies, corporates and agencies used to capture yield advantages, enhancing total return.

Larry Kekst is chief investment officer; Richard A. Wainio is client contact.

National Investment Services of America Inc.

815 E. Mason St., Milwaukee, Wis. 53202; (414) 271-6540

Total assets managed	$6,288,000,000
Total discretionary	$6,288,000,000
Total tax-exempt assets	$5,853,000,000
Total discretionary tax-exempt	$5,853,000,000
Tax-exempt clients	44
Types of accounts managed	CEFJ
Minimum separate account	$5,000,000
No. of portfolio managers	10
Size of research staff	4

National Investment Services of America Inc. is an active equity, active and passive fixed-income, balanced and short-term manager.

In equities, it focuses on growth stocks, empha-

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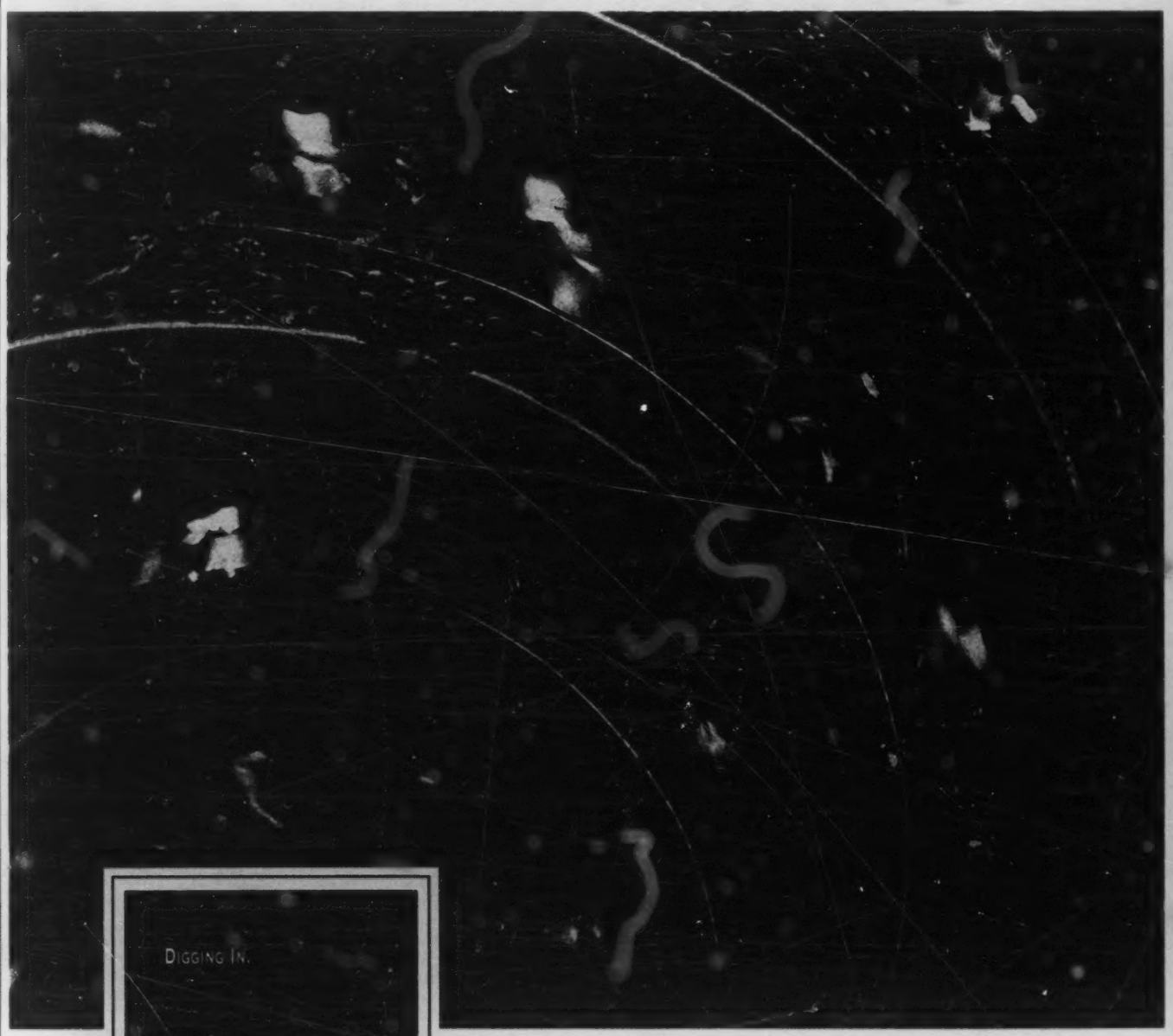

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sizing earnings momentum as the central influence on price. It uses a quantitative method to form efficient stock portfolios tied to low risk, inflation or a liability stream.

In fixed income, it employs interest rate anticipation and sector analysis, using a disciplined, quantitative method to search for relative value.

The asset mix Jan. 1 was 5% stocks and 95% bonds.

All research is generated internally.

Jess B. Yawitz is chief investment officer for fixed income; Eugene G. Martin is chief investment officer for equities; Mary Jo Dempsey and Thomas R. Tuchan are client contacts.

National Trust Co.

21 King St. E., Toronto, Ontario M5C 1B3; (416) 361-3887

Total assets managed	$6,895,000,000
Total discretionary	$1,511,000,000
Total tax-exempt	$1,511,000,000
Total discretionary tax-exempt	$1,459,000,000
For subsidiaries of U.S. firms	$49,000,000
Mortgage assets	$9,000,000
Non-North American equities	$21,000,000
Equity indexed assets	$85,000,000
Dedicated/immunized assets	$6,000,000
Tax-exempt clients	18
U.S. subsidiaries	5
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	7

National Trust Co., a Canadian firm, is an active and passive equity, active and passive fixed-income, balanced, active international/global equity and short-term manager.

Its equity approach is driven by theme investing supported by computer screens to identify undervalued sectors or stocks. It fixed-income approach uses interest rate anticipation and sector analysis, emphasizing quality and marketability of holdings that are actively traded to maximize returns.

The asset mix Jan. 1 was 35% Canadian stocks, 10% U.S. stocks, 45% bonds and 10% cash.

John Crocker is chief investment officer and client contact.

Nationwide Life Insurance

1 Nationwide Plaza, Columbus, Ohio 43216; (614) 249-7111

Total assets managed	$9,824,000,000
Total discretionary assets	$9,824,000,000
Total tax-exempt assets	$6,469,000,000
Total discretionary tax-exempt	$6,469,000,000
GICs	$366,000,000
Annuities	$760,000,000
401(k)/457 assets managed	$3,545,000,000
Types of accounts managed	CGJ
Minimum separate account	$10,000,000
No. of portfolio managers	37

Nationwide Life Insurance Co. is an active equity, active and passive fixed-income and balanced manager.

Its primary equity approach combines Graham & Dodd analysis with emerging growth, growth and low p/e stocks, and sector rotation. It substantially overweights attractive industries.

Its fixed-income approach discerns relative value in different sectors.

An additional $767 million in tax-exempt discretionary assets are managed on its behalf by external managers.

The insurer follows 100 stocks closely and 1,000, generally; 5% of research is generated internally.

The parent is Nationwide Insurance Group.

Peter F. Frenzer is chief investment officer; Anthony F. Lisi is client contact.

NBD Bank N.A.

611 Woodward Ave., Detroit, Mich. 48226; (313) 225-1000

Total assets managed	$13,600,000,000
Total discretionary	$13,600,000,000
Total tax-exempt assets	$8,300,000,000
Total discretionary tax-exempt	$8,300,000,000
International equity assets	$10,000,000
International cash assets	$1,000,000
Equity indexed assets	$270,000,000
Fixed-income indexed assets	$80,000,000
Dedicated/immunized assets	$300,000,000
401(k)/457 assets managed	$320,000,000
Tax-exempt clients	1,400
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	18
Size of research staff	20

NBD Bank N.A. is an active and passive domestic equity, active and passive fixed-income, balanced, active international/global equity, short-term, GIC and social investing manager.

The bank offers three active equity strategies: large-cap emphasizing earnings growth with a strong value discipline; large-cap emphasizing a value/contrarian approach; and a small- to intermediate-cap style.

It has three primary fixed-income disciplines: duration, which is based on interest rate anticipation; value, based on spread relationships and yield curve considerations; and high quality.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

The firm follows 200 stocks closely and 300, generally; 80% of research is generated internally.

The parent is NBD Bancorp.

James M. Lane is chief investment officer; John K. Broman is client contact.

NCM Capital Management Group Inc.

2 Mutual Plaza, 501 Willard St., Durham, N.C. 27701; (919) 688-0620

Total assets managed	$782,000,000
Total discretionary	$731,000,000
Total tax-exempt assets	$761,000,000
Total discretionary tax-exempt	$711,000,000
Tax-exempt clients	39
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	3

NCM Capital Management Group Inc. is an active value equity, active fixed-income and balanced manager.

Its equity approach screens for low p/e, positive earnings momentum, positive earnings surprise and quality. Its primary fixed-income approach is based on duration and sector management, using interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 52% stocks, 44% bonds and 4% cash.

Maceo K. Sloan is chief investment officer; Justin Beckett is client contact.

NCNB Corp.

1 NCNB Plaza T10-10, Charlotte, N.C. 28255; (704) 386-5115

Total assets managed	$67,500,000,000
Total discretionary assets	$25,000,000,000
Total tax-exempt assets	$42,500,000,000
Discretionary tax-exempt	$11,100,000,000
Real estate equity assets	$774,000,000
International equity assets	$21,000,000
Equity indexed assets	$650,000,000
Mortgage-backed assets	$128,000,000
401(k)/457 plan assets	$3,500,000,000
Tax-exempt clients	2,911
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	54
Size of research staff	15

NCNB Corp. is an active and passive domestic equity and fixed-income, active international equity, balanced, real estate and short-term manager.

Its equity approach focuses on large-cap issues with strong quantitative and superior growth characteristics when compared to the market. Portfolio decisions are based on a valuation model that focuses on earnings surprise and revisions and relative price attractiveness. Its fixed-income approach emphasizes the identification of value (yield curve, sectors, yield and issues), portfolio structure and duration adjustment. Interest rate anticipation is de-emphasized. Options and financial futures are used.

The asset mix Jan. 1 was 33% stocks, 49% bonds, 10% cash, 7% equity real estate and 1% mortgage-backed securities.

The bank follows 500 stocks closely and 2,000, generally; 20% of research is generated internally.

Charles G. Smith IV is chief investment officer; Huling F. Poston and James Wahl are client contacts.

Nelson, Benson & Zellmer

455 Sherman St., Suite 100, Denver, Colo. 80203; (303) 778-6800

Total assets managed	$371,000,000
Total discretionary	$371,000,000
Total tax-exempt assets	$240,000,000
Total discretionary tax-exempt	$240,000,000
Tax-exempt clients	25
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	4

Nelson, Benson & Zellmer Inc. is an active equity, active fixed-income and balanced manager.

A bottom-up, growth-stock manager, the firm stresses three elements of fundamental financial analysis: growth of earnings, return on equity and quality of management.

Its fixed-income approach focuses on credit analysis, emphasizing high quality and intermediate maturity.

The asset mix Jan. 1 was 89% stocks, 10% bonds and 1% cash.

The firm follows 100 stocks closely and 300, generally; 40% of the research is generated internally.

The parent is United Asset Management Inc.

W. Peterson Nelson is chief investment officer; John A. Benson is client contact.

Nelson Capital Management

525 University Ave., Suite 810, Palo Alto, Calif. 94301; (415) 326-0200

Total assets managed	$150,000,000
Total discretionary	$150,000,000
Total tax-exempt assets	$58,000,000
Total discretionary tax-exempt	$58,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	21
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Nelson Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach combines fundamental analysis with a valuation model to uncover growing companies with strong earnings trends and high potential returns. Its fixed-income approach focuses on high quality and liquidity, but also considers interest rate fluctuations, market inefficiencies, yield curve analysis and duration.

The asset mix Jan. 1 was 30% stocks, 60% bonds and 10% cash.

The firm follows 60 stocks closely and 100, generally; 30% of research is generated internally.

Philip S. Nelson is chief investment officer; Suanna M. Ramar is client contact.

Neuberger & Berman

522 Fifth Ave., New York, N.Y. 10036; (212) 790-9669

Total assets managed	$17,843,000,000
Total discretionary	$17,843,000,000
Total tax-exempt assets	$8,497,000,000
Total discretionary tax-exempt	$8,497,000,000
401(k)/457 assets managed	$265,000,000
Tax-exempt clients	224
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	54
Size of research staff	16

Neuberger & Berman is an active equity, active fixed-income, balanced short-term and mutual fund manager.

Its equity approach is value driven, employing an active bottom-up stock selection approach focusing on low p/es, low price-to-book and market capitalization of $500 million to $6 billion.

Its fixed-income approach is a limited maturity strategy, investing in securities of five years or less to provide low volatility and generate high current income.

The asset mix Jan. 1 was 41% stocks, 29% bonds and 30% cash.

The firm follows 250 stocks closely and 780, generally; 80% of research is generated internally.

Richard Cantor is chief investment officer; Robert R. McComsey is client contact.

The New England

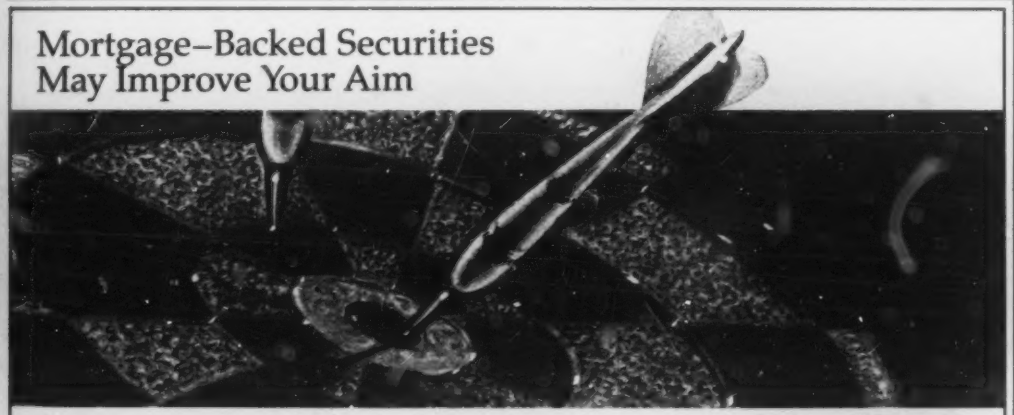
399 Boylston St., Boston, Mass. 02116; (617) 578-1490

See separate listings for Back Bay Advisors; Boylston Capital Advisors; Capital Growth Management; Copley Real Estate Advisors; Loomis, Sayles & Co.; and Marlborough Capital Advisors.

New Generation Advisers

225 Friend St., Suite 801, Boston, Mass. 02114; (617) 573-9550

Total assets managed	$5,000,000
Total discretionary	$5,000,000
Total tax-exempt assets	$1,000,000



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Total discretionary tax-exempt	$1,000,000
Tax-exempt clients	10
Types of accounts managed	CG
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	3

New Generation Advisers Inc. specializes in securities of bankrupt and distressed companies. Options are used.

The asset mix Jan. 1 was 30% stocks and 70% bonds.

The firm follows 50 stocks closely and 200, generally; 80% of research is generated internally.

George Putnam III is chief investment officer and client contact.

New York Life Insurance Co.

51 Madison Ave., New York, N.Y. 10010; (212) 576-7416

Total assets managed	$43,329,606,000
Total discretionary assets	$40,475,606,000
Total tax-exempt assets	$13,315,000,000
Discretionary tax-exempt	$13,315,000,000
GICs	$8,240,000,000
Annuities	$2,335,000,000
Equity real estate assets	$27,000,000
Mortgage assets	$1,470,000,000
International equity assets	$25,000,000
Equity indexed assets	$113,000,000
Fixed-income indexed assets	$63,000,000
Mortgage-backed assets	$4,179,000,000
Types of accounts managed	CGJ
Minimum separate account	$100,000
No. of portfolio managers	8
Size of research staff	20

New York Life Insurance Co. is an active and passive equity, active and passive fixed-income, balanced, active international/global equity, tactical asset allocation and large- and small-cap convertibles manager.

NYLIFE Securities Inc., a subsidiary, offers the New York Life Institutional Funds for tax-exempt institutional investors.

For the institutional investor, there are nine no-load mutual funds, covering a broad range of portfolios and representing mainstream, core investments. There are six actively managed funds (money market, short-term bond, bond, multiasset, value equity and growth equity) and three passively managed accounts (indexed equities, indexed bonds and EAFE index).

New York Life also provides GICs.

The separate account asset mix Jan. 1 was 29.1% stocks, 16.2% bonds, 41.4% cash, 6.9% equity real estate and 6.4% international equities.

Richard Kernan is chief investment officer; Linda Livornese is client contact.

Newbold's Asset Management Inc.

937 Haverford Road, Bryn Mawr, Pa. 19010; (215) 526-6557

Total assets managed	$4,996,000,000
Total discretionary	$4,996,000,000
Total tax-exempt assets	$4,699,000,000
Total discretionary tax-exempt	$4,399,000,000
Tax-exempt clients	141
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	11

Newbold's Asset Management Inc., an active equity and balanced manager, uses a value-oriented approach emphasizing low p/e. Its fixed-income approach is passive.

All assets were in stocks Jan. 1.

The firm follows 40 stocks closely and 120, generally; 90% of research is generated internally.

The parent is United Asset Management.

Timothy M. Havens is chief investment officer; Daniel J. Hopkins is client contact.

Newgate Management Associates

126 Main St., Northampton, Mass. 01061; (413) 586-6520

Total assets managed	$109,000,000
Total discretionary	$109,000,000
Total tax-exempt assets	$24,000,000
Total discretionary tax-exempt	$24,000,000
Tax-exempt clients	20
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	2

Newgate Management Associates is an international/global active equity, bond and balanced manager.

The firm invests in closed-end funds in North America and overseas. It provides risk-adjusted performance analysis.

The firm follows 40 to 60 funds closely and 600, generally; all research is generated internally.

George Foot is chief investment officer and client contact.

Newport Pacific Management

601 California St., Suite 610, San Francisco, Calif., 94108; (415) 781-5801

Total assets managed	$75,000,000
Total discretionary	$75,000,000
Total tax-exempt assets	$4,000,000
Total discretionary tax-exempt	$4,000,000
International equity assets	$4,000,000
Tax-exempt clients	3
Types of accounts managed	CE
Minimum separate account	$1,000,000
No. of portfolio managers	3

Newport Pacific Management, formerly Tyndall-Newport Management, is an active domestic and international equity, active international/global bond and balanced manager.

Its equity approach is to buy quality growth companies in the world's growth areas, primarily the Pacific Basin. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 85% stocks, 5% bonds and 10% cash.

John M. Mussey is chief investment officer and client contact.

NewSouth Capital Management Inc.

755 Crossover Lane, Suite 233, Memphis, Tenn. 38117; (901) 761-5561

Total assets managed	$727,000,000
Total discretionary	$707,000,000
Total tax-exempt assets	$499,000,000
Total discretionary tax-exempt	$499,000,000
Tax-exempt clients	94
Types of accounts managed	CEFG
Minimum separate account	$2,500,000
No. of portfolio managers	7

NewSouth Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

In equities, the firm invests in companies with strong balance sheets and significant insider ownership that generate free cash flow. Holdings typically generate discount multiples of earnings and book value. Options are used. Its fixed-income approach employs sector analysis. Internal and external credit research coupled with emphasis on relative sector value contribute to capital preservation goals.

The asset mix Jan. 1 was 55% stocks, 27% bonds and 18% cash.

The firm follows 75 stocks closely and 300, generally; 75% of the research is generated internally.

D. Stephen Morrow is chief investment officer; James A. Thomas III is client contact.

NFJ Investment Group Inc.

2121 San Jacinto St., Suite 1440, Dallas, Texas 75201; (214) 754-1793

Total assets managed	$219,000,000
Total discretionary	$218,000,000
Total tax-exempt assets	$216,000,000
Total discretionary tax-exempt	$216,000,000
Tax-exempt clients	11
Types of accounts managed	CFJ
Minimum separate account	$5,000,000
No. of portfolio managers	3

NFJ Investment Group Inc. is an active equity manager.

Its disciplined, low p/e equity approach is applied to an income equity strategy, a small-cap value strategy and a concentrated equity style.

The asset mix Jan. 1 was 93% stocks and 7% cash.

Ben Fischer, Christopher Najork and John Johnson are chief investment officers; Bob Clark is client contact.

Nicholas Co. Inc.

700 N. Water St., Milwaukee, Wis. 53202; (414) 272-4650

Total assets managed	$2,450,000,000
Total discretionary	$2,450,000,000
Total tax-exempt assets	$330,000,000
Total discretionary tax-exempt	$330,000,000
Tax-exempt clients	24
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	2

Nicholas Co. Inc., an active equity and balanced manager, takes a growth and low p/e approach to equities and a passive approach to fixed income.

The asset mix Jan. 1 was 80% stocks, 10% bonds and 10% cash.

Albert O. Nicholas is chief investment officer; David L. Johnson is client contact.

Nicholas-Applegate Capital Management

501 W. Broadway, Suite 2000, San Diego, Calif. 92101; (619) 234-4472

Total assets managed	$2,318,000,000
Total discretionary	$2,318,000,000
Total tax-exempt assets	$1,926,000,000
Total discretionary tax-exempt	$1,926,000,000
Tax-exempt clients	64
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	10

Nicholas-Applegate Capital Management is an active domestic and international/global equity, active fixed-income and balanced manager.

The firm is a bottom-up growth equity specialist; each portfolio is actively managed and subject to the client's risk tolerance and account constraints.

Its fixed-income approach uses a price momentum model that identifies significant interest rate trends. It uses only U.S. government securities unless the client directs otherwise.

Options and stock index futures are used.

The asset mix Jan. 1 was 96% stocks, 1% bonds and 3% cash.

The firm follows 2,600 stocks closely; 20% of research is generated internally.

Arthur E. Nicholas is chief investment officer; Fred C. Applegate is client contact.

The Nicholson Group Inc.

12000 S.W. 92nd Ave., P.O. Box 56-1065, Miami, Fla. 33256; (305) 252-4090

Total assets managed	$15,000,000
Total discretionary	$15,000,000
Total tax-exempt assets	$2,000,000
Total discretionary tax-exempt	$2,000,000
Tax-exempt clients	3
Types of accounts managed	C
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

The Nicholson Group Inc., an active equity and balanced manger, focuses on stocks with undervalued fundamentals. It uses technical analysis to time purchases with stock action and market expectations. Options are used.

The asset mix Jan. 1 was 82% stocks, 13% bonds and 5% cash.

The firm follows 100 stocks closely and 60, generally; 60% of research is generated internally.

Robert Nicholson is chief investment officer and client contact.

Nikko Capital Management (U.S.A.) Inc.

350 Park Ave., New York, N.Y. 10022; (212) 319-2730

Total assets managed	$1,661,000,000
Total discretionary	$1,561,000,000
Total tax-exempt assets	$402,000,000
Total discretionary tax-exempt	$402,000,000
International equity assets	$161,000,000
Tax-exempt clients	19
Types of accounts managed	CG
Minimum separate account	$5,000,000
No. of portfolio managers	55
Size of research staff	12

Nikko Capital Management (U.S.A.) Inc. is an active and passive domestic equity, active international equity, active domestic and international fixed-income and balanced manager.

In equities, the firm specializes in the Japanese and Pacific Basin markets, using active and quantitative strategies based on extensive research. Japanese small-cap and Pacific Basin growth stock strategies also are offered. Stock index futures are used.

The asset mix Jan. 1 was 35% stocks, 20% bonds, 5% cash and 40% foreign equities.

The firm follows 250 stocks closely and 3,500, generally; 75% of research is generated internally.

The parent is Nikko International Capital Management Co. Ltd.

Stanley Kirtman is chief investment officer; David Rochman is client contact.

NM Capital Management Inc.

7510 Montgomery N.E., Suite 201, Albuquerque, N.M. 87109; (505) 888-9500

Total assets managed	$263,000,000
Total discretionary	$251,000,000
Total tax-exempt assets	$158,000,000
Total discretionary tax-exempt	$147,000,000
International equity assets	$15,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	267
Types of accounts managed	CEFG
Minimum separate account	$350,000
No. of portfolio managers	5
Size of research staff	2

NM Capital Management Inc. is an active equity, passive fixed-income and balanced manager.

Its equity approach is bottom up, emphasizing low p/e stocks and Graham & Dodd analysis. Its fixed-income approach exphasizes A or better bonds, using interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 50% stocks, 38% bonds and 12% cash.

The firm follows 50 stocks closely and 150, generally; 50% of research is generated internally.

Gerald S. Epstein is chief investment officer; Charles H. Womack and Thomas S. Christopher are client contacts.

Nomura Capital Management

180 Maiden Lane, Suite 2903, New York, N.Y. 10038; (212) 509-8181

Total assets managed	$3,056,000,000
Total discretionary	$3,056,000,000
Total tax-exempt assets	$2,532,000,000
Total discretionary tax-exempt	$2,532,000,000
International equity assets	$2,447,000,000
International fixed-income	$85,000,000
Tax-exempt clients	24
Types of accounts managed	CEFG
Minimum separate equity account	$5,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	20
Size of research staff	447

Nomura Capital Management Inc. is an active manager of U.S. and international equity, fixed-income and balanced accounts.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

The firm uses original fundamental and economic research. Stocks are chosen through disciplined valuation aided by quantitative tools.

In fixed income, it uses interest rate anticipation, sector analysis, yield curve arbitrage, rich/poor analysis and individual anomalies to tailor portfolios to match a client's risk tolerance.

Options and financial futures are used.

The asset mix Jan. 1 was 97% stocks and 3% bonds.

The firm follows 990 stocks closely and 3,200, generally; 70% of research is generated internally.

The parent is Nomura Investment Management Co. Ltd.

Takeo Nakamura is chief investment officer; Brian X. Fitzgibbon is client contact.

North American Capital Management

8820 Delmar, P.O. Box 6728, Shawnee Mission, Kan. 66206; (913) 381-8401

Total assets managed	$8,000,000
Total discretionary	$8,000,000
Total tax-exempt assets	$4,000,000
Total discretionary tax-exempt	$4,000,000
Tax-exempt clients	20
Types of accounts managed	CFJ
Minimum separate account	$80,000
No. of portfolio managers	1

North American Capital Management, an active equity and active fixed-income manager, invests in large-cap, blue-chip companies using technical analysis as a preliminary screen. Quantitative and fundamental analysis are used to make the final investment decisions. A top-down process is used to select industries and companies. A similar process is used to determine asset allocation. Options are used for hedging only. Its fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 100% stocks.

The firm follows 400 stocks closely and 1,500, generally; 70% of research is generated internally.

Robert J. McElwain is chief investment officer and client contact.

Northern Capital Management

6510 Grand Teton Plaza, Madison, Wis. 53719; (608) 829-2990

Total assets managed	$1,134,000,000
Total discretionary	$1,134,000,000
Total tax-exempt assets	$1,033,000,000
Total discretionary tax-exempt	$1,033,000,000
International equity assets	$15,000,000
401(k)/457 assets managed	$100,000,000
Tax-exempt clients	65
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	7

Northern Capital Management is an active domestic and international/global equity, active domestic fixed-income and balanced manager.

Its equity approach is to maximize capital appreciation within the context of preserving client assets by using market timing and stock selection. Its fixed-income approach uses interest rate anticipation. Stock index options are used.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

The firm follows 50 stocks closely and 100, generally; 70% of research is generated internally.

The parent is United Asset Management.

Richard Moskalik is chief investment officer; Stephen Hawk is client contact.

The Northern Trust Co.

50 S. La Salle St., Chicago, Ill. 60675; (312) 630-6000

Total assets managed	$40,550,000,000
Total discretionary assets	$40,550,000,000
Total tax-exempt assets	$27,401,000,000
Discretionary tax-exempt	$27,401,000,000
Real estate equity assets	$120,000,000
International equity assets	$13,000,000
International fixed-income	$13,000,000
Equity indexed assets	$1,097,000,000
Fixed-income indexed assets	$283,000,000
Tax-exempt clients	418
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	40
Size of research staff	16

The Northern Trust Co. is an active and passive domestic equity and fixed-income, active international equity and fixed-income, balanced and real estate manager.

Its equity approach focuses on strong growth companies, following internal or external changes of a company or industry to capitalize on adjustments to market valuations. Its fixed-income approach is a controlled-risk style that quantifies investment objectives into a benchmark portfolio against which the firm manages. It also employs individual issue arbitrage. Options and financial futures are used.

The firm runs $33 million in hedging and overlay strategies; all of the underlying assets are managed internally.

The asset mix Jan. 1 was 8% stocks, 22.5% bonds and 69.5% cash.

The bank follows 350 stocks closely and 500, generally; all research is generated internally.

The parent is Northern Trust Corp.

James L. Kermes is chief investment officer; Donald R. Pollak is client contact.

Northwest Quadrant

450 Newport Center Drive, Suite 420, Newport Beach, Calif. 92660; (714) 720-9232

Total assets managed	$56,000,000
Total discretionary	$56,000,000
Total tax-exempt assets	$28,000,000
Total discretionary tax-exempt	$28,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	48
Types of accounts managed	C
Minimum separate account	$200,000
No. of portfolio managers	3
Size of research staff	1

Northwest Quadrant is an active equity, active fixed-income, balanced and active international/global equity manager.

A hedge equity manager, it uses convertibles, covered options, long stock/long put and closed-end funds.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 2,000 stocks generally; 95% of research is generated internally.

Roger Wilson is chief investment officer and client contact.

NWQ Investment Management Co.

655 S. Hope St., 11th Floor, Los Angeles, Calif. 90017; (213) 624-6700

Total assets managed	$3,449,000,000
Total discretionary	$3,449,000,000
Total tax-exempt assets	$1,366,000,000
Total discretionary tax-exempt	$1,366,000,000
Tax-exempt clients	42
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	10
Size of research staff	1

NWQ Investment Management Co. is an active equity, active fixed-income and balanced manager.

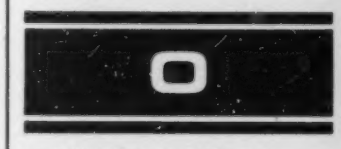
Its equity strategy combines a multidisciplined approach to capturing value with fundamentally attractive industry/sector concentration. Portfolio risk is controlled by avoiding industries with deteriorating fundamentals.

Its fixed-income approach has a total return orientation. Maturities are extended or shortened in anticipation of changes in interest rates.

The asset mix Jan. 1 was 40% stocks, 40% fixed income and 20% cash.

The firm follows 75 stocks closely and 100, generally; 20% of research is generated internally.

David A. Polak is chief investment officer; James P. Owen is client contact.



Oak Hall Capital Advisors

122 E. 42nd St., Suite 2400, New York, N.Y. 10168; (212) 972-1293

Total assets managed	$132,000,000
Total discretionary	$132,000,000
Total tax-exempt assets	$77,000,000
Total discretionary tax-exempt	$77,000,000
International equity assets	$2,000,000
International fixed-income	$1,000,000
Tax-exempt clients	10
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Oak Hall Capital Advisors Inc., an active equity manager, emphasizes out-of-favor, small- to medium-cap issues whose price, earnings and market sponsorship are in a downward trend. Certain catalysts have been identified that will enhance valuation.

The asset mix Jan. 1 was 74% stocks, 5% bonds and 21% cash.

The firm follows 100 stocks closely and 300, generally; 80% of the research is generated internally.

John C. Hathaway is chief investment officer; John J. Hock is client contact.

Oak Ridge Investments Inc.

233 N. Michigan Ave., Suite 1807, Chicago, Ill.; 60601; (312) 616-1040

Total assets managed	$50,000,000
Total discretionary	$25,000,000
Total tax-exempt assets	$10,000,000
Total discretionary tax-exempt	$5,000,000
Tax-exempt clients	41
Types of accounts managed	C
Minimum separate account	$50,000
No. of portfolio managers	2
Size of research staff	2

Oak Ridge Investments Inc. is an active and passive equity manager.

Its equity approach selects among among small-cap and S&P 100 issues expected to achieve accelerated growth and likely appreciation in six to 18 months. Balance sheet and asset valuation are also considered.

The firm follows 150 stocks closely and 2,000, generally; 50% of the research is generated internally.

David Klaskin is chief investment officer and client contact.

Oakwood Counselors Inc.

50 Highway Nine, Morganville, N.J. 07751; (908) 536-9552

Total assets managed	$65,000,000
Total discretionary	$65,000,000
Total tax-exempt assets	$16,000,000
Total discretionary tax-exempt	$16,000,000

Tax-exempt clients	20
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	3

Oakwood Counselors Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses conceptual investing, buying beneficiaries of secular trends taking place.

Its fixed-income approach anticipates credit spreads and interest rate curves to achieve greatest possible return within risk parameters.

The asset mix Jan. 1 was 50% stocks, 30% bonds and 20% cash.

The firm follows 30 stocks closely; 50% of the research is generated internally.

Paul J. Sherman is chief investment officer; Kenneth H. Mantel is client contact.

The O'Connor Group

200 Park Ave., New York, N.Y. 10166; (212) 687-7420

Total assets managed	$2,329,000,000
Total discretionary	$1,644,000,000
Total tax-exempt assets	$1,979,000,000
Total discretionary tax-exempt	$1,394,000,000
Equity real estate assets	$830,000,000
Minimum separate account	$100,000,000
No. of portfolio managers	4
Size of research staff	2

The O'Connor Group, a real estate manager, invests in prime office and industrial properties and regional malls. Properties where active management and/or development can have a significant impact are favored.

The asset mix Jan. 1 was 100% equity real estate and real estate investment trusts.

Jeremiah W. O'Connor Jr. is chief investment officer; Nancy L. Lashine is client contact.

Oechsle International Advisors

1 International Place, 44th floor, Boston, Mass. 02110; (617) 330-8810

Total assets managed	$2,312,000,000
Total discretionary	$2,312,000,000
Total tax-exempt assets	$2,200,000,000
Total discretionary tax-exempt	$2,200,000,000
International equity assets	$2,121,000,000
International fixed-income	$79,000,000
Tax-exempt clients	50
Types of accounts managed	CEF
Minimum separate account	$20,000,000
No. of portfolio managers	7
Size of research staff	4

Oechsle International Advisors is an active domestic and international/global equity and active domestic and international/global fixed-income manager.

Its equity approach emphasizes bottom-up stock-selection, aggressive top-down country allocation and value orientation. The investment horizon is 18 to 24 months; portfolios are constructed with a limited number of holdings; investments are managed in a minimum of eight and a maximum of 14 country markets.

The asset mix Jan. 1 was 96% international stocks and 4% global bonds.

Walter Oechsle is chief investment officer; Stephen Langer is client contact.

OFFITBANK

101 E. 52nd St., New York, N.Y. 10022; (212) 758-9600

Total assets managed	$2,678,000,000
Total discretionary	$2,678,000,000
Total tax-exempt assets	$867,000,000
Total discretionary tax-exempt	$867,000,000
International fixed-income	$307,000,000
International cash assets	$34,000,000
Mortgage-backed assets	$87,000,000
Tax-exempt clients	69
Types of accounts managed	CEFJ
Minimum separate account	$10,000,000
No. of portfolio managers	13

OFFITBANK is an active domestic and international fixed-income, balanced, short-term cash, high-yield and municipals manager.

Its fixed-income approach stresses risk-adjusted rates of returns, using interest rate anticipation, sector analysis and yield curve analysis. Analysis of relative value among the interrelated global fixed-income and currency markets are primary considerations. Options are used.

The asset mix Jan. 1 was 85% fixed income, 5% cash and 10% mortgage-backed securities.

Morris W. Offit is chief investment officer; Samuel R. Karelsky is client contact.

Old Kent Bank and Trust Co.-Investment Management Group

1 Vandenberg Center, Grand Rapids, Mich. 49503; (616) 771-5113

Total assets managed	$6,500,000,000
Total discretionary assets	$6,500,000,000
Total tax-exempt assets	$3,250,000,000
Total discretionary tax-exempt	$3,250,000,000
Real estate equity assets	$15,000,000
Equity indexed assets	$350,000,000
Dedicated/immunized assets	$250,000,000
401(k)/457 plan assets	$100,000,000
Tax-exempt clients	985
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	20
Size of research staff	8

Old Kent Bank and Trust Co. — Investment Management Group is an active and passive equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach uses value-oriented, quantitative screens to find undervalued securities with earnings momentum. Its fixed-income approach uses a quantitative model to assess probabilities of longer duration securities outperforming shorter duration ones. Financial futures are used.

The parent is Old Kent Finacial Corp.

Joseph T. Keating is chief investment officer; Larry Pinckney is client contact.

Olympic Capital Management Inc.

3320 Security Pacific Tower, 1301 Fifth Ave., Seattle, Wash. 98101; (206) 447-9399

Total assets managed	$1,761,000,000
Total discretionary	$1,761,000,000
Total tax-exempt assets	$1,761,000,000
Total discretionary tax-exempt	$1,761,000,000
401(k)/457 assets managed	$60,000,000
Tax-exempt clients	60
Types of accounts managed	CEFGJ
Minimum separate account	$20,000,000
No. of portfolio managers	6

Olympic Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses sector rotation and Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation and sector analysis. Options are used.

The firm follows 160 stocks closely and 700, generally; 30% of the research is generated internally.

The parent is United Asset Management.

John S. Crowl is chief investment officer and client contact.

One Federal Asset Management

1 Federal St., Boston, Mass. 02211; (617) 292-3771

Total assets managed	$2,286,000,000
Total discretionary	$2,286,000,000
Total tax-exempt assets	$1,270,000,000
Total discretionary tax-exempt	$1,270,000,000
Dedicated/immunized assets	$4,000,000
Mortgage-backed assets	$165,000,000
401(k)/457 assets managed	$329,000,000
Tax-exempt clients	27
Types of accounts managed	CEFGJ
Minimum separate account	$3,000,000
No. of portfolio managers	7

One Federal Asset Management is an active equity, active fixed-income, balanced and short-term manager.

Its growth-oriented equity approach uses a bottom-up, fundamental stock selection process. In fixed income, it uses risk-controlled active bond management to establish a benchmark to meet client objectives.

The asset mix Jan. 1 was 21% stocks, 29% bonds, 37% cash and 13% mortgage-backed securities.

The firm follows 120 stocks closely and 500, generally; 80% of the research is generated internally.

The parent is Shawmut National Corp.

David O. Rajala and Glen T. Insley are chief investment officers; Albert R. Vandam is client contact.

Oppenheimer Capital

Oppenheimer Tower, World Financial Center, New York, N.Y. 10281; (212) 667-7515

Total assets managed	$17,185,000,000
Total discretionary	$12,467,000,000
Total tax-exempt assets	$14,568,000,000
Discretionary tax-exempt	$12,137,000,000
401(k)/457 assets managed	$91,000,000
Tax-exempt clients	384
Types of accounts managed	CEFGJ
Minimum separate equity account	$5,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	23
Size of research staff	6

Oppenheimer Capital is an active equity, active fixed-income, tactical asset allocation, short-term and balanced manager.

Its equity approach focuses on elements of value, which includes business segment analysis, undedicated cash flows and hidden assets. Asset allocation is determined by analyzing eight valuation benchmarks relative to their historical levels.

Its fixed-income approach looks for sector maturity and quality groups of the bond market that provide the highest yield at the least amount of risk.

In addition to the assets above, the firm runs $2.908 billion in overlay strategies; it does not manage the underlying assets.

The asset mix Jan. 1 was 65% stocks, 18% bonds and 17% cash.

The firm follows 110 to 130 stocks closely and 7,000, generally; 95% of the research is generated internally.

The parent is Oppenheimer Financial.

George Long is chief investment officer; Frank P.L. Minard is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

P

Pacific Century Advisers Inc.

9333 Genesee Ave., Suite 250, San Diego, Calif. 92121; (619) 458-2800

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Pacific Financial Asset Management Corp.

700 Newport Center Drive, Newport Beach, Calif. 92660; (714) 760-4083

Total assets managed	$224,000,000
Total discretionary	$224,000,000
Total tax-exempt assets	$224,000,000
Total discretionary tax-exempt	$224,000,000
International equity assets	$14,000,000
Tax-exempt clients	152
Types of accounts managed	CFGJ
Minimum separate account	$25,000,000
No. of portfolio managers	5
Size of research staff	13

Pacific Financial Asset Management Corp. is an active domestic and international equity, active fixed-income, balanced and short-term manager.

The firm offers a series of pooled funds and separate account management; $224 million in discretionary tax-exempt assets is managed internally and included within the assets above. An additional $704 million in discretionary tax-exempt assets, not included above, is managed on its behalf by the following investment organizations that are profiled separately: Pacific Investment Management, Parametric Portfolio Associates, Cadence Capital Management, PMRealty Advisors and NFJ Investment Group. The series of pooled funds are in the process of being converted into a series of mutual fund portfolios.

It uses options and financial futures.

The asset mix Jan. 1 was 20% stocks, 74% bonds and 6% cash.

The parent is Pacific Mutual Life Insurance.

William Cvengros is chief investment officer; Daniel Deter is client contact.

Pacific Financial Research

9601 Wilshire Blvd., Suite 828, Beverly Hills, Calif. 90210; (213) 278-4461

Total assets managed	$1,949,000,000
Total discretionary	$1,949,000,000
Total tax-exempt assets	$1,628,000,000
Total discretionary tax-exempt	$1,628,000,000
Tax-exempt clients	55
Types of accounts managed	CEFGJ
Minimum separate account	$25,000,000
No. of portfolio managers	5
Size of research staff	3

Pacific Financial Research Inc., an active equity manager, is value-oriented and contrarian, using Graham & Dodd analysis and low p/e securities.

Its fixed-income approach views bonds as equity substitutes and buys when bonds are cheaper than stocks. Portfolios are structured to capture value between stocks and bonds.

The asset mix Jan. 1 was 71% stocks, 24% bonds and 5% cash.

The firm follows 300 stocks closely and 1,000, generally; 75% of the research is generated internally.

James H. Gipson is chief investment officer and client contact.

Pacific Investment Management Co.

840 Newport Center Drive, Suite 360, Newport Beach, Calif. 92660; (714) 640-3031

Total assets managed	$28,899,000,000
Total discretionary	$28,899,000,000
Total tax-exempt assets	$28,076,000,000
Discretionary tax-exempt	$28,076,000,000
International fixed-income	$989,000,000
International cash assets	$75,000,000
Equity indexed assets	$917,000,000
Dedicated/immunized assets	$211,000,000
Mortgage-backed assets	$9,526,000,000
401(k)/457 assets managed	$50,000,000
Tax-exempt clients	134
Types of accounts managed	CEFGJ
Minimum separate account	$50,000,000
No. of portfolio managers	10
Size of research staff	2

Pacific Investment Management Co. is an active and passive equity, active domestic and international fixed-income, balanced, short-term cash and mortgage-backed securities manager.

Its equity approach is contrarian using quantitative techniques and large-cap growth stocks. Through its valuation methodology, it focuses on seasoned, high-quality companies with consistent above-average earnings growth. Its fixed-income approach is active, seeking value across all sectors. Major swings in duration are avoided. Options and financial futures are used.

The asset mix Jan. 1 was 4% stocks, 61% bonds, 2% cash, and 33% mortgage-backed securities.

The firm follows 60 stocks closely and 500, generally; 65% of the research is generated internally.

The parent is Pacific Mutual.

William H. Gross is chief investment officer; Jim Muzzy and Margaret Riley are client contacts.

Pacific Mutual Life Insurance

700 Newport Center Drive, Newport Beach, Calif. 92660; (714) 640-3040

Total assets managed	$7,940,000,000
Total discretionary assets	$7,940,000,000
Total tax-exempt assets	$5,251,000,000
Total discretionary tax-exempt	$5,251,000,000
GICs	$3,182,000,000
Annuities	$1,121,000,000
Fixed-income indexed assets	$51,000,000
Dedicated/immunized assets	$3,182,000,000
Tax-exempt clients	852
Types of accounts managed	CGJ
No. of portfolio managers	6
Size of research staff	9

Pacific Mutual Life Insurance Co. is a passive fixed-income and guaranteed product manager.

As of Jan. 1, its separate account asset mix was 100% bonds.

William Cvengros is chief investment officer; Daniel Deter is client contact.

PaineWebber Asset Management

1285 Avenue of the Americas, New York, N.Y. 10019; (212) 713-1433

Total assets managed	$188,000,000
Total discretionary	$188,000,000
Total tax-exempt assets	$51,000,000
Total discretionary tax-exempt	$51,000,000
401(k)/457 assets managed	$17,000,000
Tax-exempt clients	128
Types of accounts managed	CEFJ
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	10

PaineWebber Asset Management is an active equity and balanced manager.

Its equity approach is value-oriented, and uses a systematic screening process to evaluate companies' relative investment merits. Its fixed-income approach is active, with investments only in U.S. government securities and high-quality corporate bonds.

The asset mix Jan. 1 was 60% stocks, 25% bonds and 15% cash.

The firm follows 50 stocks closely and 700, generally; 50% of the research is generated internally.

The parent is Mitchell Hutchins Asset Management Inc., a subsidiary of PaineWebber Inc.

Michael D. Jamison is chief investment officer and client contact.

Pailey-Needelman Asset Management Inc.

800 Newport Center Drive, Suite 450, Newport Beach, Calif. 92660; (714) 760-6644

Total assets managed	$756,000,000
Total discretionary	$522,000,000
Total tax-exempt assets	$448,000,000
Total discretionary tax-exempt	$448,000,000
Tax-exempt clients	115
Types of accounts managed	CEFGJ
Minimum separate account	$3,000,000
No. of portfolio managers	6

Pailey-Needelman Asset Management Inc. is an active equity and balanced manager.

Its equity approach is value-oriented, focusing on stocks that have low p/e, high yield, low volatility and low expectation, with substantial free cash flow and a strong balance sheet. Its fixed-income approach focuses on short-term, high-quality cash alternatives.

Roger B. Pailey is chief investment officer; Steven M. Borowski and Raymond F. Pentz are client contacts.

Palm Beach Investment Advisers Inc.

249 Royal Palm Way, Suite 303, Palm Beach, Fla. 33480; (407) 650-0200

Total assets managed	$56,000,000
Total discretionary	$51,000,000
Total tax-exempt assets	$14,000,000
Total discretionary tax-exempt	$14,000,000
Tax-exempt clients	9
Types of accounts managed	CF
Minimum separate account	$2,000,000
No. of portfolio managers	2

Palm Beach Investment Advisers Inc. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach is to buy large-cap growth stocks of high-quality companies with predictable earnings even in adverse economic periods.

In fixed income, interest rate anticipation is used. Short to intermediate maturities, laddered to smooth interest rate swings, generally are bought.

The asset mix Jan. 1 was 45% stocks, 40% bonds and 15% cash.

The firm follows 40 stocks closely and 65, generally; half of the research is generated internally.

Thomas M. Kerssey is chief investment officer; Floyd L. Wideman Jr. is client contact.

PanAgora Asset Management

260 Franklin St., Boston, Mass. 02110; (617) 439-6300

Total assets managed	$8,884,000,000
Total discretionary	$8,684,000,000
Total tax-exempt assets	$8,242,000,000
Total discretionary tax-exempt	$8,242,000,000
International equity assets	$747,000,000
International fixed-income	$976,000,000
Equity indexed assets	$3,497,000,000
Fixed-income indexed assets	$513,000,000
Dedicated/immunized assets	$341,000,000
401(k)/457 assets managed	$213,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	20
Size of research staff	3

PanAgora Asset Management is a passive domestic equity and fixed income, active and passive international equity and fixed-income, tactical asset allocation, enhanced equity and fixed-income index funds and short-term manager.

Its investment approaches are structured, and include core quantitative products and passive indexing products. Options and financial futures are used.

The asset mix Jan. 1 was 68% stocks, 30% bonds and 2% cash.

The firm follows 500 stocks closely and 6,000, generally; 95% of research is generated internally.

Richard A. Crowell is chief investment officer; F. Corning Kenley is client contact.

Paradigm Partners Inc.

405 114th Ave. S.E., Bellevue, Wash. 98004; (206) 453-5227

Total assets managed	$149,000,000
Total discretionary	$149,000,000
Total tax-exempt assets	$134,000,000
Total discretionary tax-exempt	$134,000,000
Tax-exempt clients	6
Types of accounts managed	CEF
Minimum separate account	$20,000,000

Paradigm Partners Inc. specializes in non-traditional alternative investment strategies that have outperformed the S&P 500 significantly. Investments have annual liquidity and include only marketable, publicly traded securities. Portfolios can be diversified or concentrated in one or more of three categories: market neutral; high return; and negative correlation.

Michael E. Dunmire is chief investment officer; George Hambrecht is client contact at (212) 677-9757.

Parametric Portfolio Associates Inc.

7310 Columbia Center, 701 Fifth Ave., Seattle, Wash. 98104; (206) 386-5575

Total assets managed	$524,000,000
Total discretionary	$524,000,000
Total tax-exempt assets	$475,000,000
Total discretionary tax-exempt	$475,000,000
International equity assets	$299,000,000
Equity indexed assets	$17,000,000
401(k)/457 assets managed	$86,000,000
Tax-exempt clients	12
Types of accounts managed	CG
Minimum separate account	$10,000,000

Parametric Portfolio Associates Inc. is an active and passive domestic equity and active international/global equity manager using proprietary quantitative methods.

The asset mix Jan. 1 was 99% stocks and 1% cash.

Mark England-Markun is chief investment officer; William F. Cornelius is client contact.

Parker Dillon Carlson & Johnson Inc.

120 W. Third St., Suite 300, Dayton, Ohio 45402; (513) 223-0600

Total assets managed	$43,000,000
Total discretionary	$43,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
401(k)/457 assets managed	$4,000,000
Tax-exempt clients	41
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	3

Parker Dillon Carlson & Johnson Inc. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach maintains a carefully diversified portfolio of small to midsize companies using a disciplined relative valuation process for buy/sell decisions. Its fixed-income approach maintains a diversified portfolio of U.S. government securities with an average maturity of three years.

The asset mix as of Jan. 1 was 50% stocks, 45% bonds and 5% cash.

The firm follows 50 stocks closely and 150, generally; 75% of the research is generated internally.

Leslie O. Parker III is chief investment officer and client contact.

Parmelee Management Corp.

950 Third Ave., New York, N.Y. 10022; (212) 753-1597

Total assets managed	$65,000,000
Total discretionary	$65,000,000
Total tax-exempt assets	$50,000,000
Total discretionary tax-exempt	$50,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	50
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	1

Parmelee Management Corp. is an active equity, active fixed-income and balanced manager.

Its eclectic, value-oriented and risk-averse equity approach stresses growth and emerging growth stocks, sector rotation and market timing/tactical asset allocation. The fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

Alfred G. Parmelee is chief investment officer and client contact.

Investment management consultant profiles will run Nov. 11.

Payden & Rygel
333 S. Grand Ave., Suite 3250, Los Angeles, Calif. 90071; (213) 625-1900

Total assets managed	$8,200,000,000
Total discretionary	$8,200,000,000
Total tax-exempt assets	$5,800,000,000
Total discretionary tax-exempt	$5,800,000,000
International fixed-income	$800,000,000
401(k)/457 assets managed	$565,000,000
Tax-exempt clients	66
Types of accounts managed	CEFGJ
No. of portfolio managers	10
Size of research staff	4

Payden & Rygel is an active domestic and international fixed-income and short-term manager.

It specializes in managing domestic and global short-term fixed income (zero to five years) with an emphasis on high quality and liquidity.

All assets were in fixed income Jan. 1.

Joan A. Payden is chief investment officer; Lynda L. Faber is client contact.

PCM International Inc.
820 Morris Turnpike, Short Hills, N.J. 07078; (201) 912-2500

Total assets managed	$551,000,000
Total discretionary	$551,000,000
Total tax-exempt assets	$508,000,000
Total discretionary tax-exempt	$508,000,000
International equity assets	$417,000,000
International cash assets	$91,00,000
Tax-exempt clients	16
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	5

PCM International Inc. is an active international/global equity manager.

Its equity approach seeks to own a limited number of stocks that offer the best price relative to future earnings prospects. Market and currency risks are managed with a defensive overlay. Options are used.

The asset mix Jan. 1 was 82% stocks and 18% cash.

The firm follows 400 stocks closely and 1,600 generally; 70% of the research is generated internally.

The parent is Prudential Life Insurance Co. of America.

Cassandra Hardman and Barry Gillman are chief investment officers; Jeffrey Kutler is client contact.

Peckham Boston Advisors
4 Longfellow Place, Suite 3305, Boston, Mass. 02114; (617) 523-4440

Total assets managed	$52,000,000
Total discretionary	$52,000,000
Total tax-exempt assets	$52,000,000
Total discretionary tax-exempt	$52,000,000
Equity real estate assets	$52,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	3

Peckham Boston Advisors, a real estate manager, emphasizes properties net leased to strong national companies. Parameters include guaranteed fixed income combined with upside potential.

All assets were in equity real estate Jan. 1.

John M. Peckham III is chief investment officer; Joseph Julian is client contact.

Pembroke Management Ltd.
1010 Sherbrooke St. W., Suite 818, Montreal, Quebec H3A 2R7; (514) 848-1991

Total assets managed	$400,000,000
Total discretionary	$400,000,000
Total tax-exempt	$275,000,000
Total discretionary tax-exempt	$275,000,000
For subsidiaries of U.S. firms	$49,000,000
Tax-exempt clients	10
U.S. subsidiaries	1
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	5

Pembroke Management Ltd., a Canadian firm, is an active equity manager specializing in high-growth equity investments in Canada and the United States. The firm emphasizes investment in owner/entrepreneur-operated, small to midsize companies.

The asset mix Jan. 1 was 75% Canadian stocks, 20% U.S. stocks and 5% cash.

Ian A. Soutar is chief investment officer; Jeffrey Tory is client contact.

The Penn Mutual Life Insurance Co.
Independence Square, Philadelphia, Pa. 19172; (215) 956-8000

Total assets managed	$6,353,000,000
Total discretionary assets	$6,353,000,000
Total tax-exempt assets	$2,564,000,000
Total discretionary tax-exempt	$2,564,000,000
GICs	$878,000,000
Annuities	$743,000,000
Types of accounts managed	CG
No. of portfolio managers	8
Size of research staff	6

The Penn Mutual Life Insurance Co. is an active equity, active and passive fixed income and short-term manager.

Its disciplined equity approach focuses on the most outstanding growth stocks. Buy and sell decisions are based on rigorous fundamental analysis and relative valuation measures. Its fixed-income approach seeks to maximize return on invested assets, taking into consideration risk and economic and market outlooks. Options and financial futures are used.

Its real estate approach involves fixed-rate mortgage loan origination on well leased and located income-producing property nationwide. Its equity investments are in high-quality income properties with significant upside potential.

The separate account asset mix Jan. 1 was 80% stocks, 10% bonds and 10% cash.

The insurer follows 60 stocks closely and 120, generally; 35% of the research is generated internally.

William V. Ferdinand is chief investment officer; James A. Clary is client contact.

Penreal Advisors Ltd.
700, 1090 W. Georgia St., Vancouver, British Columbia V6E 3V7; (604) 685-8351

Total assets managed	$312,000,000
Total discretionary	$312,000,000
Total tax-exempt	$312,000,000
Total discretionary tax-exempt	$312,000,000
For subsidiaries of U.S. firms	$74,000,000
Equity real estate assets	$298,000,000
Mortgage assets	$14,000,000
Tax-exempt clients	82
U.S. subsidiaries	18
Types of accounts managed	CG
No. of portfolio managers	21
Size of research staff	3

Penreal Advisors Ltd., a Canadian firm, is real estate manager.

Its investment approach focuses on the acquisition of properties for the purpose of upgrading, expanding. Development and intensive property management are used to increase the market value of the investments.

The asset mix Jan. 1 was 96% equity real estate and 4% mortgages.

AMI Partners Inc. and T.A.L. Investment Counsel Ltd. own a combined 50% interest in the firm.

Walter R. Badun is chief investment officer; Malcolm F. Leitch is client contact.

Pension Management Co.
995 Galleria Financial Center, 5075 Westheimer, Houston, Texas 77056; (713) 552-1440

Total assets managed	$45,000,000
Total discretionary	$45,000,000
Total tax-exempt assets	$37,000,000
Total discretionary tax-exempt	$37,000,000
International equity assets	$1,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	75
Types of accounts managed	CG
No. of portfolio managers	1
Size of research staff	2

Pension Management Co. is an active equity, active and passive fixed-income, balanced and short-term cash manager.

Its value-oriented equity approach uses sector rotation and low p/e stocks. Stock selection is done through a proprietary, computer-driven method. In-house research indicates sectors in which to invest and stocks offering the most value.

Its fixed-income approach employs sector analysis, investing in a mix of short-term corporate bonds and long-term convertible debentures.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

The firm follows 1,800 stocks closely and 1,800, generally; all research is generated internally.

John H. Lee is chief investment officer; James Walker is client contact.

Master trust directory: Oct. 14.

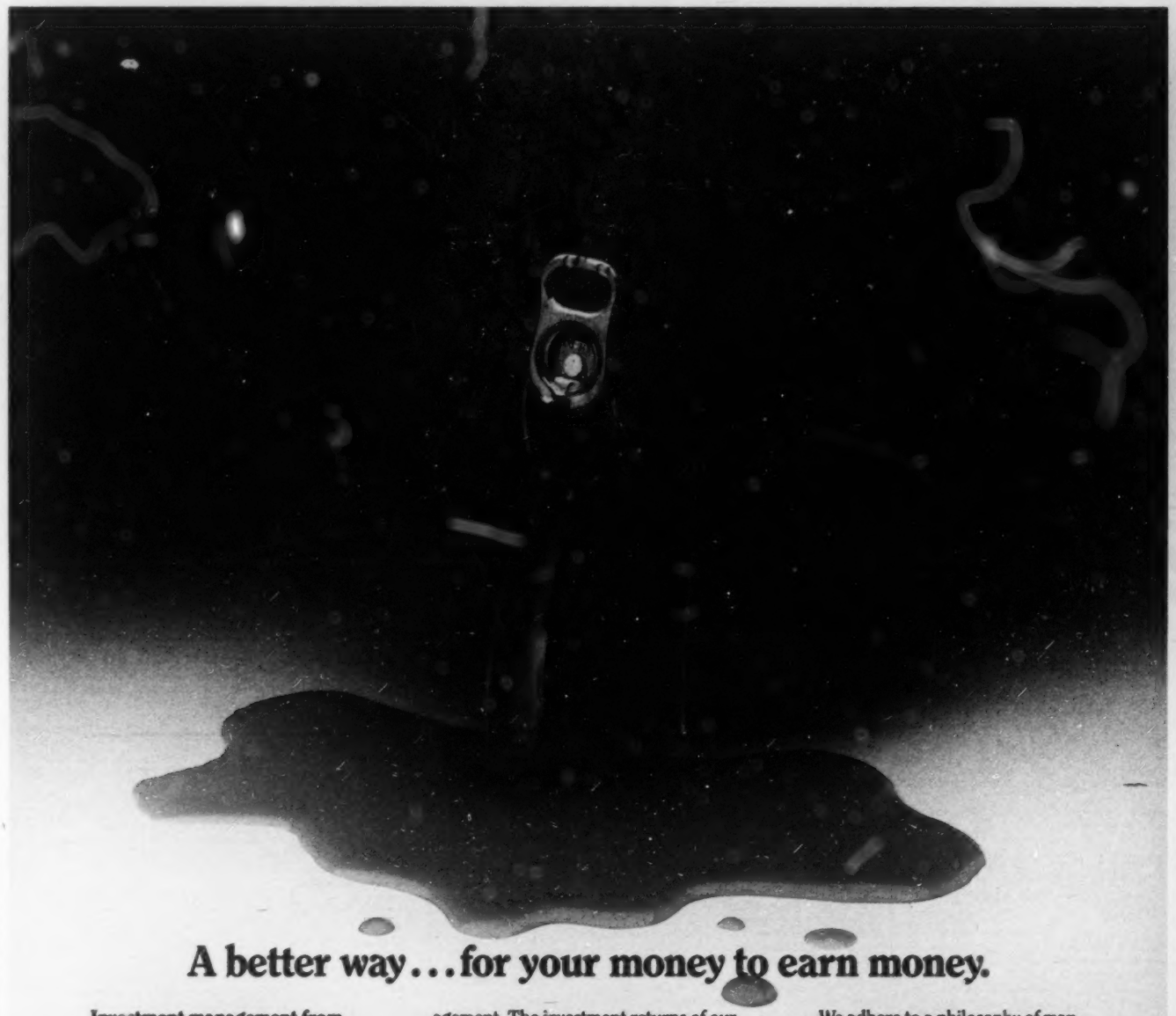
Pension Portfolio Advisors
25800 Northwestern Highway, Southfield, Mich. 48075; (313) 357-4125

Total assets managed	$406,000,000
Tax-exempt assets managed	$406,000,000
Assigned to other firms	$406,000,000
Tax-exempt clients	718
Types of accounts managed	CGJ
Minimum separate account	$200,000
No. of portfolio managers	2
Size of research staff	2

Pension Portfolio Advisors is a manager of managers. Of the assets above, $319 million is passed to its parent company, Royal Maccabees Life Insurance Co., for management; the balance of $87 million is run by external managers.

Active and passive equity, balanced and passive international/global equity products are offered through external managers. Passive, growth stock and equity income strategies are employed. The fixed-income approaches offered are based on interest rate anticipation, sector analysis, maturity and quality.

Donald I. Gregg is chief investment officer; Carole Beauchemin is client contact.



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Peregrine Capital Management Inc.

512 Nicollet Mall, Suite 830, Minneapolis, Minn. 55402; (612) 343-7600

Total assets managed	$1,218,000,000
Total discretionary	$1,218,000,000
Total tax-exempt assets	$1,009,000,000
Total discretionary tax-exempt	$1,009,000,000
Mortgage-backed assets	$90,000,000
401(k)/457 assets managed	$11,000,000
Tax-exempt clients	24
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	1

Peregrine Capital Management Inc. is an active equity and active bond manager.

It offers two equity approaches. The small-cap approach uses an aggressive, emerging growth style seeking information gaps in small companies with potential for price appreciation. Its growth equity approach seeks high-quality, medium- to large-cap growth issues that are undervalued.

It also offers two fixed-income approaches. The total return fixed-income approach uses below-market durations to control volatility and emphasizes high-credit-quality issues. The positive return approach combines appreciation potential with a floor.

The asset mix Jan. 1 was 65% stocks, 16% bonds, 10% cash and 9% mortgage-backed securities.

The firm follows 100 stocks closely and 750, generally; 30% of the research is generated internally.

The parent is Norwest Corp.

Robert B. Mersky is chief investment officer; Derek G. Hepworth is client contact.

Perkins Capital Management

708 E. Lake St., Wayzata, Minn. 55391; (612) 473-8367

Total assets managed	$60,000,000
Total discretionary	$60,000,000
Total tax-exempt assets	$30,000,000
Total discretionary tax-exempt	$30,000,000
Tax-exempt clients	150
Types of accounts managed	CFG
Minimum separate account	$100,0
No. of portfolio managers	3
Size of research staff	1

Perkins Capital Management Inc. is an active equity and balanced manager.

Its equity approach emphasizes market timing and stock selection. It seeks unrecognized, transitional companies for underlying higher earnings and higher p/e ratios. Its fixed-income approach seeks maximum income consistent with perceived quality rating with interest rate anticipation.

The asset mix Jan. 1 was 80% stocks, 10% bonds and 10% cash.

The firm follows 250 stocks closely and 500, generally; 25% of the research is generated internally.

Richard W. Perkins is chief investment officer; Harry A. Lindberg Jr. is client contact.

Peters, Gamm, West & Vincent Inc.

8100 E. 22nd St., Bldg 800, Wichita, Kan. 67226; (316) 687-2143

Total assets managed	$973,000,000
Total discretionary	$860,000,000
Total tax-exempt assets	$716,000,000
Total discretionary tax-exempt	$716,000,000
Tax-exempt clients	20
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	4

Peters, Gamm, West & Vincent Inc. is an active duration fixed-income manager utilizing a top down approach.

The asset mix Jan. 1 was 95% bonds and 5% cash.

Gary L. Gamm is chief investment officer; Marc A. Vincent is client contact.

Petersen, Flynn & Dinsmore

1 Market Plaza, 1208 Stevart Tower, San Francisco, Calif. 94104; (415) 777-0344

Total assets managed	$400,000,000
Total discretionary	$400,000,000
Total tax-exempt assets	$300,000,000
Total discretionary tax-exempt	$300,000,000
Tax-exempt clients	17
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	2

Petersen, Flynn & Dinsmore Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes growth and low p/e stocks. Its fixed-income approach is driven by interest rate anticipation.

The asset mix Jan. 1 was 47% stocks, 38% bonds and 15% cash.

Don Dinsmore is chief investment officer; he and Larry Petersen are client contacts.

Philadelphia Investment Management Group

1616 Walnut St., Philadelphia, Pa. 19103; (215) 545-0079

Total assets managed	$194,000,000
Total discretionary	$190,000,000
Total tax-exempt assets	$50,000,000
Total discretionary tax-exempt	$43,000,000
401(k)/457 assets managed	$12,000,000
Tax-exempt clients	77
Types of accounts managed	CEFJ
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	1

Philadelphia Investment Management Group is an active equity, active bond and balanced manager.

Its value-oriented, quantitative equity approach uses a growth factor based on historical and expected earnings. Its fixed-income approach emphasizes interest-rate anticipation and sector analysis. The firm does not make large interest-rate bets, but gradually moves toward its bond objectives.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

The firm follows 50 stocks closely and 50, generally; 65% of the research is generated internally.

William M. Shattle is chief investment officer and client contact.

Philippe Investment Management Inc.

122 E. 42nd St., New York, N.Y. 10168; (212) 687-3616

Total assets managed	$656,000,000
Total discretionary	$656,000,000
Total tax-exempt assets	$542,000,000
Total discretionary tax-exempt	$542,000,000
International equity assets	$434,000,000
International cash assets	$108,000,000
Tax-exempt clients	7
Types of accounts managed	CFG
Minimum separate account	$25,000,000
No. of portfolio managers	6
Size of research staff	6

Philippe Investment Management Inc., an active international and global equity manager, incorporates both top-down and bottom-up methodologies.

Equal weight is placed on country, sector and stock decisions. Portfolios are diversified with approximately 150 securities, and moderate use is made of cash equivalents. Generally, one-third of the holdings is in smaller-cap issues; 30% to 40% are not in the representative indexes.

The asset mix Jan. 1 was 80% stocks and 20% cash.

The firm follows 300 stocks closely and 500, generally.

Claudette Mayer is client contact.

Phillips, Hager & North Ltd.

17th Floor, 1055 W. Hastings St., Vancouver, British Columbia V6E 2H3; (604) 684-4361

Total assets managed	$4,000,000,000
Total discretionary	$4,000,000,000
Total tax-exempt	$3,200,000,000
Total discretionary tax-exempt	$3,200,000,000
For subsidiaries of U.S. firms	$600,000,000
Tax-exempt clients	92
U.S. subsidiaries	12
Types of accounts managed	CEFG
Minimum separate account	$13,000,000
No. of portfolio managers	11
Size of research staff	7

Phillips, Hager & North Ltd., a Canadian firm, is an active equity, active fixed-income, balanced, active and passive international/global equity, short-term and tactical asset allocation manager.

Its equity approach is growth-oriented, focusing on strong balance sheets and high return on equity. In international equities, it makes active country selections and passive security selections.

In fixed income, it uses interest rate anticipation, sector analysis and spread analysis.

The asset mix Jan. 1 was 41% Canadian stocks, 10% U.S. stocks, 45% bonds and 4% cash.

It follows 200 stocks closely and 350, generally.

Richard F. Bradshaw is chief investment officer; Marina Matei is client contact.

The Phoenix

1 American Row, Hartford, Conn. 06115; (203) 275-5000

Total assets managed	$9,600,000,000
Total discretionary assets	$4,330,000,000
Total tax-exempt assets	$3,361,000,000
Total discretionary tax-exempt	$3,361,000,000
GICs	$827,000,000
Equity real estate assets	$489,000,000
Tax-exempt clients	1,100
Types of accounts managed	CEGJ
Minimum separate account	$10,000,000
No. of portfolio managers	13
Size of research staff	7

The Phoenix is an active equity, active fixed-income, balanced, real estate, short-term and convertibles manager.

Its equity approach seeks the most earnings growth at the lowest relative price. Loss avoidance is emphasized. In fixed income, interest rate anticipation and sector analysis are used.

In real estate, it makes participating investments in developmental and existing properties in suburban markets, acquiring them at below-market prices and diversifying by geography and property type.

The separate account asset mix Jan. 1 was 74% stocks, 7% bonds, 10% cash and 9% equity real estate.

The insurer follows 300 stocks closely; 10% of research is generated internally.

Phillip R. McLoughlin is chief investment officer; Paul A. Atkins is client contact.

Phoenix Investment Management Co.

55 Pine St., Providence, R.I. 02903; (401) 331-6650

Total assets managed	$118,000,000
Total discretionary	$110,000,000
Total tax-exempt assets	$45,000,000
Total discretionary tax-exempt	$45,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	22
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	3

Phoenix Investment Management Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is opportunistic, identifying major secular economic, political, demographic, technological and psychological trends and, using classical fundamental analysis, selecting equities that amplify these trends.

Its fixed-income approach also is opportunistic, relying on historical spread analysis and fundamental economic and credit research to identify areas of under and over valuation.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

The firm follows 100 stocks closely and 150, generally; 25% of the research is generated internally.

Marie J. Langlois is chief investment officer; Gerald J. Fogarty Jr. is client contact.

Piedmont Capital Management Associates

800 Main St., Suite 200, Hilton Head, S.C. 29926; (803) 681-9023

Total assets managed	$540,000,000
Total discretionary	$530,000,000
Total tax-exempt assets	$32,000,000
Total discretionary tax-exempt	$32,000,000
Mortgage-backed assets	$5,000,000
Types of accounts managed	CJ
Minimum separate account	$5,000,000
No. of portfolio managers	3

Piedmont Capital Management Associates Inc. is a passive equity, active and passive fixed-income, balanced and short-term manager.

Its fixed-income approach is to maximize total return subject to specified risk guidelines. Evaluation is determined by seasonal, cyclical and secular interest rates. Maturity and sector distribution are emphasized.

The asset mix Jan. 1 was 5% stocks, 70% bonds, 10% cash and 15% mortgage-backed securities.

Walter M. Campbell is chief investment officer; Margot R. McCord is client contact.

Pierson Capital Management

Public Ledger Building, Suite 1036, Philadelphia, Pa. 19106; (215) 625-0188

Total assets managed	$149,000,000
Total discretionary	$139,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
Minimum separate account	$500,000
No. of portfolio managers	3

Pierson Capital Management Inc. is an active domestic and international equity and fixed-income and balanced manager.

Its equity approach is bottom-up, focusing on low p/e and growth stocks.

Its fixed-income approach uses convertibles and maturity-constrained government obligations.

The asset mix Jan. 1 was 55% stocks, 30% bonds and 15% cash.

Daniel E. Devine is chief investment officer; Mark Hanna is client contact.

Pilgrim Baxter Greig & Associates

1255 Drummers Lane, Suite 200, Wayne, Pa. 19087; (215) 341-9000

Total assets managed	$1,246,000,000
Total discretionary	$1,246,000,000
Total tax-exempt assets	$1,246,000,000
Total discretionary tax-exempt	$1,246,000,000
Tax-exempt clients	13
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	4

Pilgrim Baxter Greig & Associates is an active equity manager.

Its equity approach uses fundamental and quantitative analysis on a proprietary universe of 600 growth and emerging growth companies.

The asset mix Jan. 1 was 83% stocks and 17% cash.

The firm also follows 700 to 1,000 stock generally; 90% of the research is generated internally.

Gary L. Pilgrim is chief investment officer; James G. Hesser is client contact.

Pinnacle Associates Ltd.

630 Fifth Ave., Suite 240, New York, N.Y. 10111; (212) 757-7333

Total assets managed	$525,000,000
Total discretionary	$525,000,000
Total tax-exempt assets	$425,000,000
Total discretionary tax-exempt	$425,000,000
Tax-exempt clients	20
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	2

Pinnacle Associates Ltd. is an active domestic and international equity and balanced manager.

Its domestic equity approach emphasizes small and midsize companies, using an opportunistic, bottom-up and often contrarian strategy to discover undervalued equities with potential for above-average returns. For international, it purchases unique and rapidly growing companies, supplemented with a quantitative approach to country weightings.

Its fixed-income approach is based on interest rate anticipation. Maturities are limited to seven years and staggered.

The asset mix Jan. 1 was 81.7% equities, 6.7% bonds and 11.6% cash.

The firm follows 75 stocks closely and 100, generally; 60% of the research is generated internally.

Thomas Passios is chief investment officer; Mr. Passios and Nicholas Reitenbach are client contacts.

Pioneering Management

60 State St., Boston, Mass. 02109; (617) 742-7825

Total assets managed	$6,334,000,000
Total discretionary	$6,334,000,000
Total tax-exempt assets	$335,000,000
Total discretionary tax-exempt	$335,000,000
Tax-exempt clients	7
Types of accounts managed	CEG
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	13

Pioneering Management Corp. is an active equity and active fixed-income manager.

Its equity approach focuses on small to midsize companies; it maintains a basic value approach, using fundamental, original research with long-term investment horizons.

Its fixed-income approach is based on active duration management, stressing high-quality issues, preservation of principal and a low maturity risk profile.

The asset mix Jan. 1 was 93% equities, 4% bonds and 3% cash.

Eighty percent of the firm's research is generated internally.

The parent is Pioneer Group Inc.

David D. Tripple is chief investment officer; Barbara A. Ryan and Z. Andrew Yarumian are client contacts.

Piper Capital Management

222 S. Ninth St., Minneapolis, Minn. 55402; (612) 342-6410

Total assets managed	$3,960,000,000
Total discretionary	$3,810,000,000
Total tax-exempt assets	$336,000,000
Total discretionary tax-exempt	$336,000,000
Mortgage-backed assets	$141,000,000
401(k)/457 assets managed	$16,000,000
Tax-exempt clients	63
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	14
Size of research staff	14

Piper Capital Management is an active equity, active bond, balanced and short-term manager.

The firm is a fundamental value equity investor, basing valuation on an internal earnings payback analysis. Risk is controlled by measuring sensitivity analysis against six key macroeconomic factors.

In fixed income, the firm is a duration manager. Only investment-grade bonds are considered, and portfolio duration will vary by 50% from the benchmark index.

The asset mix Jan. 1 was 17% stocks, 41% bonds and 42% mortgage-backed securities.

The firm follows 330 stocks closely and 330, generally; 50% of the research is generated internally.

The parent is Piper Jaffray Inc.

Paul Dow is chief investment officer; John Gibas is client contact.

Pittsburgh National Bank

Fifth & Wood streets, 3rd Floor, Pittsburgh, Pa. 15265; (412) 762-3773

Total assets managed	$12,995,000,000
Total discretionary assets	$6,472,000,000
Total tax-exempt assets	$3,072,000,000
Total discretionary tax-exempt	$2,900,000,000
International equity assets	$45,000,000
Equity indexed assets	$25,000,000
Dedicated/immunized assets	$20,000,000
Mortgage-backed assets	$348,000,000
401(k)/457 plan assets	$350,000,000
Tax-exempt clients	540
Types of accounts managed	CEFGJ
Minimum separate account	$1,500,000
No. of portfolio managers	8
Size of research staff	20

Pittsburgh National Bank is an active and passive equity, active fixed-income, balanced, active international equity and short-term manager.

Its equity approach uses selections drawn from a 300-stock, large-cap universe. Sector rotations over- underweight S&P 500 sectors. Stock index futures are used. In fixed-income, it uses interest rate anticipation. Investment selection is centered in one- to 10-year maturities favoring U.S. government/agency and mortgage-backed issues.

The asset mix Jan. 1 was 36% stocks, 40% bonds, 12% cash and 12% mortgage-backed securities.

The bank follows 300 stocks closely and 350, generally; 90% of research is generated internally.

The parent is PNC Financial Corp.

John Martin is chief investment officer; Donald J. Kendrick is client contact.

Platner & Associates

462 Walnut St., Allentown, Pa., 18102; (215) 821-0160

Total assets managed	$17,000,000
Total discretionary	$0,000,000
Total tax-exempt assets	$0,000,000
Total discretionary tax-exempt	$6,000,000
Tax-exempt clients	5
Types of accounts managed	C
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	1

Platner & Associates is an active equity, active and passive fixed-income and balanced manager.

Its equity approach uses quality growth stocks, emerging growth stocks an sector rotation. Fundamental analysis underscores stock selection, with an emphasis on asset allocation into various sectors as market conditions change. Its primary fixed-income approach is based on interest rate anticipation. Options are used.

The asset mix Jan. 1 was 48% stocks, 31% bonds, 19% cash, 1% mortgages and 1% other.

The firm follows 60 stocks closely and 80, generally; 20% of the research is generated internally.

Robert F. Platner is chief investment officer and client contact.

PMRealty Advisors Inc.

800 Newport Center Drive, Suite 300, Newport Beach, Calif. 92660; (714) 721-5000

Total assets managed	$528,000,000
Total discretionary	$528,000,000
Total tax-exempt assets	$528,000,000
Total discretionary tax-exempt	$528,000,000
Equity real estate assets	$528,000,000
Tax-exempt clients	45
Types of accounts managed	CGJ
Minimum separate account	$20,000,000
Size of research staff	5

PMRealty Advisors Inc., an equity real estate manager, follows a research-driven approach. Insulation of investment risk is a primary objective and is exemplified by the firm's development of specialty niche products and active portfolio management techniques.

All assets were in equity real estate Jan. 1.

The parent is Pacific Mutual Life.

Jim McWalters is chief investment officer; Pete Hammer is client contact.

The Portfolio Group

30 Rockefeller Plaza, New York, N.Y. 10112; (212) 621-2370

Total assets managed	$2,095,000,000
Total discretionary	$2,095,000,000
Total tax-exempt assets	$416,000,000
Total discretionary tax-exempt	$416,000,000
401(k)/457 assets managed	$140,000,000
Tax-exempt clients	195
Types of accounts managed	CEFJ
Minimum separate account	$500,000
No. of portfolio managers	12
Size of research staff	2

The Portfolio Group is an active equity, active fixed-income, balanced and short-term manager.

Stock selection is focused on companies demonstrating superior returns on their invested capital and whose stocks are selling at attractive valuations.

Its fixed-income approach uses interest rate anticipation and sector analysis. Duration is adjusted depending on its three- to six-month interest rate forecast. Key to its methodology is a short-term interest rate model that evaluates the relative market risk/reward.

The asset mix Jan. 1 was 23% stocks, 70% bonds and 7% cash.

The firm follows 50 stocks closely and 100 generally; 20% of the research is generated internally.

Timothy J. Morris is chief investment officer; Edna Z. Parry is client contact.

Posthorn Global Asset Management U.K. Ltd.

2 Broadgate, 7th Floor, London EC2M 7HA, U.K.; 71-601-0021

Total assets managed	$1,696,000,000
Total discretionary	$1,696,000,000
Total tax-exempt assets	$251,000,000
Total discretionary tax-exempt	$251,000,000
International equity assets	$45,000,000
International fixed-income	$193,000,000
International cash assets	$13,000,000
Tax-exempt clients	3
Types of accounts managed	CG
Minimum separate account	$15,000,000
No. of portfolio managers	7
Size of research staff	3

Posthorn Global Asset Management U.K. Ltd. is an active domestic and international/global equity and fixed-income, short-term and tactical asset allocation manager.

Its equity approach uses a quantitative analysis of value. Returns are enhanced by timely market allocation, investment trend-related stock selection and non-speculative currency hedging on all assets.

Its fixed-income approach uses economic scenario development, technical assessment, construction of model portfolios and timely rebalancing. Options and fixed-income futures are used.

The asset mix Jan. 1 was 18% stocks, 77% bonds and 5% cash.

The parent is Shearson Lehman Brothers, whose parent is American Express Co.

Pauline Barrett is chief investment officer; Heath McLendon is client contact.

T. Rowe Price Associates

100 E. Pratt St., Baltimore, Md. 21202; (301) 547-2000

Total assets managed	$35,290,000,000
Total discretionary	$34,985,000,000
Total tax-exempt assets	$10,300,000,000
Discretionary tax-exempt	$10,230,000,000
Equity real estate assets	$15,000,000
Equity indexed assets	$325,000,000
Fixed-income indexed assets	$2,970,000,000
Dedicated/immunized assets	$10,000,000
Mortgage-backed assets	$1,385,000,000
401(k)/457 assets managed	$2,570,000,000
Tax-exempt clients	119
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	36
Size of research staff	38

T. Rowe Price Associates Inc. is an active and passive equity, active and passive fixed-income, balanced, short-term, mortgage-backed and high-yield manager. Real estate is offered through a subsidiary.

It offers a range of active and semi-passive strategies. Internal fundamental research is used to identify trends and companies of interest.

Its active fixed-income approach uses economic analysis, interest rate anticipation and duration analysis. In-house credit research helps avoid volatility.

The asset mix Jan. 1 was 22.8% stocks, 39.2% bonds, 24.5% cash and 13.5% mortgage-backed securities.

The firm follows 250 stocks closely and more than 5,000, generally; 90% of the research is generated internally.

George J. Collins is chief investment officer; Charles H. Salisbury Jr. is client contact.

● T. Rowe Price Realty Advisers Inc. manages $15 million in tax-exempt assets.

It invests in income-producing, commercial properties using active portfolio and asset management to achieve stable income and enhance appreciation potential.

Reid G. Samuelson is chief investment officer; Laura C. Sorce is client contact.

Rowe Price-Fleming International Inc.

100 E. Pratt St., Baltimore, Md. 21202; (301) 547-2141

Total assets managed	$4,362,000,000
Total discretionary	$4,362,000,000
Total tax-exempt assets	$3,424,000,000
Total discretionary tax-exempt	$3,424,000,000
International equity assets	$2,534,000,000
International fixed-income	$616,000,000
International cash assets	$274,000,000
401(k)/457 assets managed	$44,000,000
Tax-exempt clients	20
Types of accounts managed	CEFG
Minimum separate account	$20,000,000
No. of portfolio managers	12
Size of research staff	89

Rowe Price-Fleming International Inc. is an active international/global equity and active and passive international/global fixed-income manager.

Its equity approach uses top-down/bottom-up methods and country selection as key components. Active regional equity and small company, emerging markets management also are offered.

Its fixed-income approach applies an analysis of interest and exchange rate movements over a short and intermediate range to obtain a balance between income and capital appreciation. Options and fixed-income futures are used.

The asset mix Jan. 1 was 74% international stocks, 18% international bonds and 8% international cash.

The firm follows 1,800 stocks closely and 2,500, generally; 90% of the research is generated internally.

The parents are T. Rowe Price Associates and Fleming Group.

Martin G. Wade is chief investment officer; George A. Murnaghan is client contact.

T. Rowe Price Guaranteed Asset Advisers Inc.

4435 Waterfront Drive, Suite 306, Glen Allen, Va. 23060; (804) 346-0227

Total assets managed	$2,225,000,000
Total discretionary	$2,225,000,000
Total tax-exempt assets	$2,225,000,000
Total discretionary tax-exempt	$2,225,000,000
401(k)/457 assets managed	$2,030,000,000
Types of accounts managed	CGJ
Minimum separate account	$25,000,000
No. of portfolio managers	3

T. Rowe Price Guaranteed Asset Advisers Inc., an active guaranteed investment contracts manager, seeks stable and consistent investment returns while minimizing portfolio risk and administrative burdens. GICs, bank investment contracts and short-term fixed-income securities are used.

The asset mix Jan. 1 was 95% GICs and 5% cash.

The parent is T. Rowe Price Associates Inc.

Kenneth L. Walker is chief investment officer; Keith W. Lewis is client contact.

T. Rowe Price Realty Advisers Inc.

515 E. Flower St., 31st Floor, Los Angeles, Calif. 90071; (213) 239-8800

See entry for T. ROWE PRICE ASSOCIATES.

PRIMCO Capital Management Inc.

101 S. Fifth St., Suite 2150, Louisville, Ky. 40202; (502) 589-2011

Total assets managed	$8,500,000,000
Total discretionary	$8,500,000,000
Total tax-exempt assets	$8,500,000,000
Total discretionary tax-exempt	$8,500,000,000
401(k)/457 assets managed	$7,500,000,000
Tax-exempt clients	46
Types of accounts managed	CEFGJ
Minimum separate account	$50,000,000
No. of portfolio managers	5
Size of research staff	11

PRIMCO Capital Management Inc. is a stable return manager. Its investment approach concentrates on sector and issuer analysis and seeks maximized portfolio yields in all interest rate environments through minimizing or eliminating risk charges that would otherwise be assessed the portfolio.

The asset mix Jan. 1 was 98% GICs and 2% cash.

The parent is INVESCO MIM.

Vernon S. Hodge is chief investment officer; John J. Monahan is client contact.

Prime Asset Management

1251 Avenue of the Americas, Suite 1100, New York, N.Y. 10020; (212) 575-2550

Total assets managed	$236,000,000
Total discretionary	$159,000,000
Total tax-exempt assets	$190,000,000
Total discretionary tax-exempt	$135,000,000
Equity indexed assets	$135,000,000
Types of accounts managed	CE
Minimum separate account	$2,000,000
No. of portfolio managers	3
Size of research staff	2

Prime Asset Management Corp. is an active and passive equity, balanced, active international/global equity and fixed-income, short-term, tactical asset allocation and global options arbitrage manager.

Its equity approach uses enhanced index funds and an informational tactical asset allocation strategy. This disciplined program identifies when expected returns are attractive for an asset class and selects the portfolio mix that maximizes risk adjusted returns.

Its fixed-income approach uses enhanced benchmark strategies, a market-neutral futures and options overlay strategy, which enhances returns on core portfolios by identifying relative mispricing in the global options markets. Options and financial futures are used.

The asset mix Jan. 1 was 100% stocks.

In addition to the assets above, $22 million in discretionary taxable assets was passed to external managers.

The firm has $20 million in discretionary tax-exempt assets in global options arbitrage and currency overlay programs. All of the underlying assets are managed internally.

The firm follows 20 stocks closely and 60, generally.

Robert J. Groden is chief investment officer; Pamela Clement and Virginia Henneberry are client contacts.

PRIMECAP Management Co.

225 S. Lake Ave., Pasadena, Calif. 91101; (818) 304-9222

Total assets managed	$2,187,000,000
Total discretionary	$2,187,000,000
Total tax-exempt assets	$1,877,000,000
Total discretionary tax-exempt	$1,877,000,000
Tax-exempt clients	18
Types of accounts managed	CEF
Minimum separate account	$50,000,000
No. of portfolio managers	4
Size of research staff	2

PRIMECAP Management Co. is an active equity manager.

Its equity approach uses fundamental analysis with growth stocks and sector rotation. It has a value orientation and a focus on long-term capital growth.

The asset mix Jan. 1 was 93.8% stocks, 6.2% cash.

Howard B. Schow is chief investment officer; Mitchell J. Milias is client contact.

Princeton Bank & Trust

2 Tower Center, East Brunswick, N.J. 08816-1096; (908) 220-3368

Total assets managed	$2,999,000,000
Total discretionary assets	$2,520,000,000
Total tax-exempt assets	$324,000,000
Total discretionary tax-exempt	$324,000,000
401(k)/457 plan assets	$80,000,000
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	13
Size of research staff	1

Princeton Bank & Trust is an active equity and fixed-income, balanced and short-term manager.

Its equity approach is long term and fundamental, focusing on superior earnings growth and stability, market leadership, low debt and increasing return on equity. Its fixed-income approach uses interest rate anticipation, specializing in short- to intermediate-term maturities with a maximum average life of seven years and an A rating.

The asset mix Jan. 1 was 30% stocks, 60% bonds and 10% cash.

The parent is Chemical Bank/New Jersey Holdings.

Francis B. Lane is chief investment officer; Joseph E. Serzan is client contact.

Princeton Investment Management Co.

15 Roszel Road, Princeton, N.J. 08540; (609) 452-7010

Total assets managed	$90,000,000
Total discretionary	$90,000,000
Total tax-exempt assets	$18,000,000
Total discretionary tax-exempt	$18,000,000
International equity assets	$1,000,000
Tax-exempt clients	8
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	1

Princeton Investment Management Co. is an ac-

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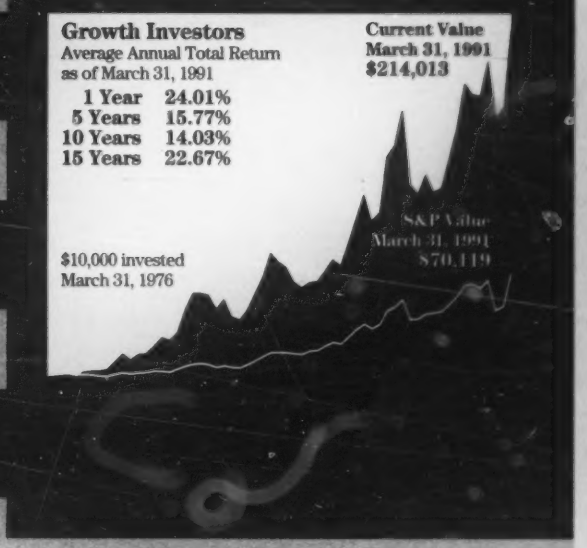

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tive equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, and uses Graham & Dodd analysis and low p/e screens. Its fixed-income approach uses sector analysis and interest rate anticipation.

The asset mix Jan. 1 was 65% stocks, 25% bonds and 10% cash.

William Primm is chief investment officer and client contact.

The Principal Financial Group

711 High St., Des Moines, Iowa 50392; (515) 247-6791

Total assets managed	$29,558,000,000
Total discretionary assets	$29,558,000,000
Total tax-exempt assets	$21,508,000,000
Discretionary tax-exempt	$21,508,000,000
GICs	$3,500,000,000
Annuities	$1,989,000,000
Equity real estate assets	$384,000,000
Mortgage assets	$10,932,000,000
International equity assets	$75,000,000
Equity indexed assets	$20,000,000
Mortgage-backed assets	$1,025,000,000
401(k)/457 assets managed	$6,700,000,000
Tax-exempt clients	10,000
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	35

The Principal Financial Group is an active domestic and international equity, active fixed-income, real estate, asset allocation and short-term manager.

The Principal manages international equity using a value-oriented approach. Its fixed-income approach is fundamental, using both public and private markets and focusing on interest rates, credit risk, maturities and term.

Its real estate approach emphasizes newly constructed, fully leased buildings of less than $30 million. It focuses on low leverage with national diversification.

The separate account asset mix Jan. 1 was 54% stocks, 8% bonds, 2% cash, 3% equity real estate, 6% mortgages, 3% mortgage-backed securities, and 24% commercial paper.

The insurer follows 500 stocks closely and 3,000, generally; 98% of research is generated internally.

Roy Ehrle is chief investment officer; Dan J. Fitzgerrell is client contact.

● Invista Capital Management Inc., an active equity manager, manages $2.23 billion in discretionary tax-exempt assets for 12 clients. It provides domestic equity management for The Principal and its assets are included above.

Its equity approach develops investment themes and selects stocks based on expected long-term cash flows. Sector rotation is used.

S. Ralph Koernicke is chief investment officer and client contact.

Pritchard, Herr & Associates

3251 Third Ave. North, Suite 143, St. Petersburg, Fla. 33713; (813) 328-1500

Total assets managed	$242,000,000
Total discretionary	$242,000,000
Total tax-exempt assets	$165,000,000
Total discretionary tax-exempt	$165,000,000
Mortgage-backed assets	$17,000,000
Tax-exempt clients	95
Types of accounts managed	CF
Minimum separate account	$200,000
No. of portfolio managers	5
Size of research staff	1

Pritchard, Herr & Associates Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its investment process monitors current and expected rates of return for all major asset classes and adjusts portfolios in response to changing economic conditions and inflation rates.

The asset mix Jan. 1 was 30% stocks, 30% bonds, 30% cash and 10% mortgage-backed securities.

The firm follows 75 stocks closely and 300, generally; 20% of the research is generated internally.

Kent R. Herr is chief investment officer; Beth A. Cahill is client contact.

Progress Investment Management Co.

71 Stevenson St., Suite 1430, San Francisco, Calif. 94105; (415) 512-3480

Total:	
Assigned to other firms	$99,000,000
Tax-exempt:	
Assigned to other firms	$99,000,000
Tax-exempt clients	8
Types of accounts managed	CG
Minimum separate account	$18,000,000
No. of portfolio managers	1

Progress Investment Management Co., a manager of managers, offers active equity and fixed-income management.

Blended investment styles are offered in the firm's trusts. Equity approaches include growth and emerging growth stocks, sector rotation, quantitative and value (low p/e). Fixed-income approaches include interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 69% stocks, 25% bonds and 6% cash.

Edwin C. Callan is chief investment officer; Marx L. Cazenave is client contact.

Property Capital Associates

1 Post Office Square, Boston, Mass. 02109; (617) 451-2400

Total assets managed	$830,000,000
Total discretionary	$830,000,000
Total tax-exempt assets	$830,000,000
Total discretionary tax-exempt	$830,000,000
Equity real estate assets	$830,000,000
Tax-exempt clients	39
Types of accounts managed	CEFGJ
Minimum separate account	$25,000,000
No. of portfolio managers	4

Property Capital Associates, a real estate manager, invests selectively in major income-producing properties nationwide. It seeks relatively high yields and inflation protection through increases in current returns and long-term capital values.

Anthony D. Fox is chief investment officer; Gary R. Schwandt is client contact.

Provident Capital Management

1700 Market St., Suite 2720, Philadelphia, Pa. 19103-3899; (215) 561-6000

Total assets managed	$2,278,000,000
Total discretionary	$2,278,000,000
Total tax-exempt assets	$2,278,000,000
Total discretionary tax-exempt	$2,278,000,000
International equity assets	$80,000,000
401(k)/457 assets managed	$45,000,000
Tax-exempt clients	51
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	2

Provident Capital Management is an active equity, active fixed-income, balanced and active international/global equity manager.

Its equity approach is team- and value-oriented using a bottom-up strategy focusing on low p/es.

The fixed-income philosophy emphssizes the value of the business cycle analysis within the context of a global economy as a predictive tool for forecasting interest rates. Bond maturities are shifted along the yield curve depending on this evaluation. The firm's value disciplines include sector analysis, credit research and diversification with regard to quality, maturity and market sectors.

The asset mix Jan. 1 was 45% stocks, 51% bonds and 4% cash.

The firm follows 150 stocks closely and 400, generally; 75% of the research is generated internally.

The parent is PNC Financial Corp.

Thomas S. Stewart is chief investment officer and client contact.

Provident Investment Counsel

300 N. Lake Ave., Pasadena, Calif. 91101; (818) 449-8500

Total assets managed	$4,952,000,000
Total discretionary	$4,952,000,000
Total tax-exempt assets	$4,396,000,000
Total discretionary tax-exempt	$4,396,000,000
Tax-exempt clients	252
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	9
Size of research staff	4

Provident Investment Counsel is an active equity, active fixed-income and balanced manager.

Its equity approach combines companies of varying sizes. It systematically and in a disciplined manner buys companies that have superior financial characteristics and are experiencing an accelerating rate of earnings growth. Its primary fixed-income approach is based on interest rate trend recognition and the study of macroeconomic factors influencing that trend. Sector weightings for fixed-income holdings are based on computer-aided relative value analysis.

The asset mix Jan. 1 was 70% stocks, 21% bonds and 9% cash.

The firm follows 70 stocks closely and 150, generally; 70% of the research is generated internally.

Robert M. Kommerstad is chief investment officer; Jeffery J. Miller is client contact.

Provident National Assurance Co.

1 Fountain Square, Chattanooga, Tenn. 37402; (615) 755-1901

Total assets managed	$7,857,000,000
Total discretionary assets	$7,835,000,000
Total tax-exempt assets	$7,835,000,000
Total discretionary tax-exempt	$7,835,000,000
GICs	$6,658,000,000
Annuities	$919,000,000
401(k)/457 assets managed	$5,400,000,000
Types of accounts managed	CG
No. of portfolio managers	4
Size of research staff	4

Provident National Assurance Co. primarily is a GIC and annuities manager.

The parent is Provident Life & Accident.

James Weishan is chief investment officer; David J. Unruh is client contact.

Prudential Asia Fund Management Ltd.

Alexandra House, 18 Chater Road, 32nd Floor, Central Hong Kong; 844-1055

Total assets managed	$157,000,000
Total discretionary	$157,000,000
Total tax-exempt assets	$16,000,000
Total discretionary tax-exempt	$16,000,000
International equity assets	$16,000,000
Tax-exempt clients	2
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	16

Prudential Asia Fund Management Ltd., an international equity manager, focuses exclusively on Asian equities to reap the benefit of local knowledge garnered from six Asian offices in identifying undervalued growth companies.

The firm follows 400 stocks closely and 3,500, generally; 70% of the research is generated internally.

The parent is The Prudential Insurance Co. of America.

Elizabeth Tran is chief investment officer and client contact.

Prudential Asset Management Group

3 Gateway Center, Newark, N.J. 07102; (201) 802-8436

Total assets managed	$51,178,000,000
Total discretionary assets	$49,017,000,000
Total tax-exempt assets	$50,926,000,000
Discretionary tax-exempt	$48,765,000,000
GICs	$21,452,000,000
Annuities	$11,165,000,000
Equity real estate assets	$462,000,000
Mortgage assets	$12,638,000,000
International equity assets	$1,348,000,000
International fixed-income	$756,000,000
Mortgage-backed assets	$2,481,000,000
401(k)/457 assets managed	$6,322,000,000
Tax-exempt clients	1,000
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000

Prudential Asset Management Group, through its subsidiaries, offers active and passive equity and fixed-income, balanced, real estate, active and passive international, short-term, tactical asset allocation and venture capital management.

The parent is Prudential Insurance Co. of America.

Garnett Keith is chief investment officer; Robert "Buck" Bowen is client contact.

Prudential Assurance Co.

300-141 Adelaide St. W., Toronto, Ontario M5H 3L9; (416) 362-4441

Total assets managed	$3,700,000,000
Total discretionary	$3,500,000,000
Total tax-exempt	$435,000,000
Total discretionary tax-exempt	$410,000,000
For subsidiaries of U.S. firms	$25,000,000
Tax-exempt clients	85
U.S. subsidiaries	6
Types of accounts managed	CU
Minimum separate account	$4,300,000
No. of portfolio managers	8

Prudential Assurance Co. Ltd., a Canadian firm, is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is fundamentalist and active, using sector rotation, market timing and Graham & Dodd analysis. It concentrates on marketable Canadian stocks and weights industries against index subgroups. Quantitative analysis is used to construct U.S. portfolios. Its fixed-income approach uses interest rate anticipation, concentrating on high-quality marketable bonds. Portfolios are well diversified and actively traded.

The asset mix Jan. 1 was 35% Canadian stocks, 7% U.S. stocks, 50% bonds and 8% cash.

David Fanning is chief investment officer; Ken Kukonen is client contact.

Prudential Diversified Investment Strategies

351 Broad St., 20 Prudential Plaza, Newark, N.J. 07102-3777; (201) 802-7427

Total assets managed	$1,503,000,000
Total discretionary	$1,503,000,000
Total tax-exempt assets	$1,503,000,000
Total discretionary tax-exempt	$1,503,000,000
Equity indexed assets	$1,503,000,000
Tax-exempt clients	64
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	2

Prudential Diversified Investment Strategies is a balanced and passive equity manager.

Stock/bond/cash management is offered with a growth, value or index tilt. Additionally, the firm offers equity indexed funds in a commingled or single client arrangement.

In addition to the assets above, $9.948 billion in discretionary tax-exempt assets is passed to external managers for management.

All assets were in stocks Jan. 1.

The parent is Prudential Insurance Co. of America.

Paul C. Guidone is chief investment officer and client contact.

Prudential Fixed Income Advisors

2 Gateway Center, 7th Floor, Newark, N.J. 07102; (201) 802-6790

Total assets managed	$12,262,000,000
Total discretionary assets	$12,262,000,000
Total tax-exempt assets	$12,195,000,000
Discretionary tax-exempt	$12,195,000,000
Fixed-income indexed assets	$3,009,000,000
Dedicated/immunized assets	$7,042,000,000
Mortgage-backed assets	$67,000,000
Tax-exempt clients	35
Types of accounts managed	CGJ
Minimum separate account	$40,000,000
No. of portfolio managers	10
Size of research staff	22

Prudential Fixed Income Advisors is an active and passive fixed-income, short-term and nuclear decommissioning trust manager.

Its fixed-income approach is structured. Long-term strategies with fixed duration targets are developed, adding value through credit and yield curve analysis, sector weighting and basic arbitrage. Fixed-income futures are used.

The asset mix Jan. 1 was 99% bonds and 1% mortgage backed-securities.

The parent is The Prudential Insurance Co. of America.

Leonard M. Santoro is chief investment officer; Thomas M. Heneghan is client contact.

Prudential Realty Group

3 Prudential Plaza, 751 Broad St., Newark, N.J. 07102; (201) 802-3401

Total assets managed	$43,159,000,000
Total discretionary	$43,062,000,000
Total tax-exempt assets	$5,489,000,000
Total discretionary tax-exempt	$5,393,000,000
Equity real estate assets	$4,947,000,000
Mortgage assets	$446,000,000
Tax-exempt clients	214
Types of accounts managed	CGJ
Minimum separate account	$75,000,000
No. of portfolio managers	6
Size of research staff	7

Prudential Realty Group is a full service real estate firm consisting of three operating units: The Prudential Property Co., The Prudential Mortgage Capital Co. and Prudential Real Estate Investors. Prudential Real Estate Investors provides investment management services, both debt and equity, for tax-exempt institutions. It uses a top-down, bottom-up approach to investing, using internal research capabilities to develop portfolio strategies that meet specific risk/return objectives.

The asset mix Jan. 1 was 91.7% equity real estate and 8.3% mortgages.

The parent is Prudential Insurance Co. of America.

Eugene B. Heimberg is chief investment officer; Kevin Myers is client contact.

Prudential Securities Investment Management

9 W. 57th St., New York, N.Y. 10019; (212) 415-5800

Total assets managed	$2,000,000,000
Total discretionary	$2,000,000,000
Total tax-exempt assets	$1,400,000,000
Total discretionary tax-exempt	$1,400,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	10

Prudential Securities Investment Management, formerly Prudential-Bache Investment Management, is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on low p/e stocks and using Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 70% stocks and 30% bonds.

The firm follows 125 stocks closely; 25% of the research is generated internally.

The parent is Prudential Securities Inc.

Stuart Shikiar is chief investment officer; Jeffrey Lailand is client contact.

PSM Investors

121 Judy Farm Road, Carlisle, Mass. 01741; (508) 369-0033

Total assets managed	$500,000,000
Total discretionary	$500,000,000
Total tax-exempt assets	$425,000,000
Total discretionary tax-exempt	$425,000,000
Tax-exempt clients	200
Types of accounts managed	C
Minimum separate account	$50,000
No. of portfolio managers	1

PSM Investors, an active equity manager, uses mutual funds, switching funds as market conditions warrant.

All assets were in stocks Jan. 1.

Stan Lipstadt is chief investment officer and client contact.

Public Storage Inc.

1015 Grandview Ave., Glendale, Calif. 91201; (818) 244-8080

Total assets managed	$3,247,000,000
Total discretionary	$2,900,000,000
Total tax-exempt assets	$1,191,000,000
Total discretionary tax-exempt	$1,191,000,000
Tax-exempt clients	135
Types of accounts managed	CEFG
Minimum separate account	$15,000,000
No. of portfolio managers	23
Size of research staff	2

Public Storage Inc., a real estate manager, acquires commercial and high-grade industrial sites in major metropolitan areas for the development and management of self-storage facilities.

All assets were in equity real estate Jan. 1.

Hugh Horne is chief investment officer; Thomas J. Mizo is client contact.

The Putnam Cos. Inc.

1 Post Office Square, Boston, Mass. 02114; (617) 292-10[illegible]

Total assets managed	$42,295,000,000
Total discretionary	$41,925,000,000
Total tax-exempt assets	$8,344,000,000
Total discretionary tax-exempt	$8,031,000,000
International equity assets	$256,000,000
International fixed-income	$638,000,000
Equity indexed assets	$5,000,000
Fixed-income indexed assets	$1,324,000,000
Dedicated/immunized assets	$1,066,000,000
401(k)/457 assets managed	$300,000,000
Tax-exempt clients	116
Types of accounts managed	CEFJ
Minimum separate account	$10,000,000
No. of portfolio managers	36
Size of research staff	45

The Putnam Cos. is an active equity, active and passive fixed-income, active international/global equity and fixed-income, balanced and short-term manager.

Its equity approach seeks investment positions in four areas: quality growth, focusing on stocks with superior quality, growth and value characteristics; special equity, concentrating on medium- and small-cap companies with rapid earnings growth; OTC emerging growth, investing in companies with superior earnings growth expectations; and basic value, seeking undervalued companies with earnings and dividend growth rates equal to the market and above market yield.

Its fixed-income approach analyzes the yield curve and uses all sectors to produce consistent superior returns across all market conditions. Options and financial futures are used.

The asset mix Jan. 1 was 17% stocks, 70% bonds, 3% cash and 10% international stocks and bonds.

The firm follows 1,250 stocks closely and 4,700, generally; 75% to 100% of the research is generated internally.

The parent is Marsh and McLennan.

Francis H.M. Kelly, Gary N. Corburn and Anthony Regan are chief investment officers; Thomas J. Lucey is client contact.

Quaker Capital Management

1710 Allegheny Building, 429 Forbes Ave., Pittsburgh, Pa. 15219; (412) 281-1948

Total assets managed	$20,000,000
Total discretionary	$20,000,000
Total tax-exempt assets	$9,000,000
Total discretionary tax-exempt	$9,000,000
Tax-exempt clients	12
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	1
Size of research staff	1

Quaker Capital Management is an active equity and balanced manager.

Its equity approach is value- and growth-oriented, using proprietary fundamental analysis to purchase issues at a minimum 50% discount to their long-term intrinsic value. Options are used.

Its fixed-income approach uses sector analysis, optimizing the yield curve and taking advantage of abnormal interest rate spreads and proprietary credit analysis.

The asset mix Jan. 1 was 82% stocks, 17% bonds, and 1% cash.

The firm follows 300 stocks closely and 3,500, generally; 90% of the research is generated internally.

Mark G. Schoeppner is chief investment officer; Michael S. Kennedy is client contact.

Quantilogic Asset Management Co. Inc.

44 Montgomery St., Suite 1950, San Francisco, Calif. 94104; (415) 434-1130

Total assets managed	$1,494,000,000
Total discretionary	$1,494,000,000
Total tax-exempt assets	$1,494,000,000
Total discretionary tax-exempt	$1,494,000,000
Tax-exempt clients	7
Types of accounts managed	CEG
Minimum separate account	$50,000,000
No. of portfolio managers	2
Size of research staff	1

Quantilogic Asset Management Co. Inc. is a tactical asset allocation manager.

Its approach is quantitative, using valuation and economic cycle analysis to measure expected risks and returns. Options and financial futures are used.

The asset mix Jan. 1 was 45% stocks and 55% bonds.

All of the research is generated internally.

A. Darrell Braswell is chief investment officer; Jeffrey L. Winter is client contact.

Quest Advisory Corp.

1414 Avenue of the Americas, New York, N.Y. 10019; (212) 486-1445

Total assets managed	$1,302,000,000
Total discretionary	$841,000,000
Total tax-exempt assets	$461,000,000
Total discretionary tax-exempt	$461,000,000
Tax-exempt clients	7
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	6

Quest Advisory Corp., an active equity manager, concentrates on securities of small and mid-size companies using a strict fundamental approach. It focuses on understanding the private worth or value of a business.

The asset mix Jan. 1 was 91.5% stocks; 1.5% bonds and 7% cash.

The firm follows 1,000 stocks closely and generally; 95% of the research is generated internally.

Charles M. Royce is chief investment officer; Joanna Newgard and Jack Fockler are client contacts.

R

RAC Advisors Inc.
4000 Town Center, Suite 101,
Southfield, Mich. 48075; (313)
358-2282

Total assets managed	$13,000,000
Total discretionary	$5,000,000
Total tax-exempt assets	$5,000,000
Total discretionary tax-exempt	$5,000,000
Tax-exempt clients	3
Types of accounts managed	F
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

RAC Advisors Inc. is an active and passive equity, passive fixed-income and balanced manager.

Its primary equity approach uses growth stocks and a low-risk, high-potential valuation method with an emphasis on Graham & Dodd analysis.

The asset mix Jan. 1 was 55% stocks, 40% bonds and 5% cash.

Arthur Rodeckar is chief investment officer and client contact.

Rainier Investment Management Inc.
601 Union St., Suite 2801, Seattle,
Wash. 98101; (206) 464-0400

Total assets managed	$1,301,000,000
Total discretionary	$1,301,000,000
Total tax-exempt assets	$1,301,000,000
Total discretionary tax-exempt	$1,301,000,000
401(k)/457 assets managed	$100,000,000
Tax-exempt clients	84
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	5

Rainier Investment Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach focuses on growth stocks with a value discipline. Positive earnings surprises, low relative p/e multiples, surplus cash flow generation and financial integrity are emphasized.

Its fixed-income approach uses interest rate anticipation and sector analysis. The firm works to maximize income while preserving capital and maintaining low volatility. Portfolios emphasize intermediate maturity and high credit quality.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

Patricia L. Frost is chief investment officer; J. Glenn Haber is client contact.

Rampart Investment Management Co. Inc.
1 International Place, 23rd Floor,
Boston, Mass. 02110; (617)
261-7171

Total assets managed	$71,000,000
Total discretionary	$71,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	6

Rampart Investment Management Co. Inc. manages options overwrite equity and fixed-income programs and hedged equities. In addition to the assets above, the firm runs $776 million in options overwriting on equity and fixed-income portfolios. It does not manage any of the underlying assets.

The firm specializes in hedged equity portfolio management as an overlay. Long/short portfolio management is also offered. The firm's overwrite seeks to enhance fixed-income portfolios by 50 to 100 basis points.

The firm follows 200 stocks closely and 400, generally; 90% of the research is generated internally.

George M. DeVoe Jr. is chief investment officer; David R. Fraley is client contact.

Annual Reports

CENTEL

Centel Corporation is a rapidly growing telecommunications company that combines the nation's 11th largest telephone operation serving 1.7 million lines with the 10th largest cellular operation serving 200,000 customers. In 1990, telephone lines grew 5% and cellular customers grew 64%. The company's annual indicated dividend of $.88 has been increased for 29 consecutive years.

7

CSX Corporation

CSX Corporation, with assets of $13 billion and 1990 revenue of $8.2 billion, is an international transportation services company with principal businesses in rail freight, ocean container shipping, intermodal carriage, inland barging, trucking, warehousing, distribution and related services. The company also has interests in real estate, resorts and technology. Headquarters are in Richmond, Va.

9

Federal-Mogul Corporation NYSE (FMO)

Federal-Mogul Corporation, headquartered in Southfield, Michigan, is a manufacturer and worldwide distributor of products ranging form precision parts for the transportation industry, farm equipment, construction and manufacturing industries to aerospace and electronic components. Shares of this billion-dollar corporation are traded on the New York and Pacific Stock Exchanges.

8

NORD RESOURCES CORPORATION

Nord Resources Corporation (NYSE:NRD) is a mineral exploration and development company which strives to enhance the value of its worldwide properties and ore reserves. Nord supplies vital minerals for the manufacturing of paint pigments, commercial grades of paper as well as products for the horticultural, food, beverage and pharmaceutical industries.

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Ramsay Investment Counsel
510 Holly Sugar Building, Colorado Springs, Colo. 80903; (719) 473-6925

Total assets managed	$45,000,000
Total discretionary	$43,000,000
Total tax-exempt assets	$6,000,000
Total discretionary tax-exempt	$6,000,000
Tax-exempt clients	9
Types of accounts managed	CEF
Minimum separate account	$100,000
No. of portfolio managers	3

Ramsay Investment Counsel Inc. is an active equity, passive fixed-income, balanced and short-term manager.

Its primary equity approach focuses on stocks with a five- to 10-year record of 10% or more growth of income and earnings.

Its primary fixed-income approach is buy-and-hold, to provide higher yield and low risk.

The asset mix Jan. 1 was 42% stocks, 37% bonds and 21% cash.

The firm follows 75 stocks closely and 125, generally; 60% of the research is generated internally.

Robert H. Ramsay is chief investment officer and client contact.

Rayner Associates Inc.
655 Redwood Highway, Suite 370, Mill Valley, Calif. 94941; (415) 332-7433

Total assets managed	$135,000,000
Total discretionary	$135,000,000
Total tax-exempt assets	$18,000,000
Total discretionary tax-exempt	$18,000,000
Tax-exempt clients	6
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	5

Rayner Associates Inc. is an active equity, active fixed-income, balanced, and short-term manager.

Its equity approach uses growth and value styles to select stocks that have positive fundamentals and that are attractively priced. Its fixed-income approach uses interest rate anticipation and maturity yield selection to target investments that are chosen based on quality, diversification and maturity.

The asset mix Jan. 1 was 35% stocks, 61% bonds and 4% cash.

The firm follows 60 stocks closely and 90, generally; 50% of the research is generated internally.

Arno Rayner is chief investment officer and client contact.

RCB International
29 Federal St., Stamford, Conn. 06901; (203) 977-7000

Total:	
Assigned to other firms	$2,448,000,000
Tax-exempt:	
Assigned to other firms	$1,026,000,000
Equity real estate assets	$201,000,000
International equities	$452,000,000
International fixed-income	$16,000,000
Tax-exempt clients	34
Types of accounts managed	CEF
Minimum separate account	$50,000,000
No. of portfolio managers	4
Size of research staff	3

RCB International Inc., a manager of managers, offers active domestic and international/global equity, active domestic and international/global bond, real estate and short-term management.

In equity and fixed income, the firm offers a group of specialized managers with complementary styles and disciplines. Returns above those of a relevant benchmark are sought at a reduced level of risk. Options and financial futures futures are used. About $172 million is managed in overlay strategies.

Real estate in closed-end portfolios is managed intensively to enhance value and realize profits at properties' full potential. A closed-end land development fund also is offered.

The asset mix Jan. 1 was 67.5% stocks, 11.5% bonds, 1.4% cash and 19.6% equity real estate.

The above statistics include the assets of RCB Trust Co., RCB International Ltd. and Diversified Fund Management Inc.

William L. Green is chief investment officer; Robert J. Russell is client contact.

RCM Capital Management
4 Embarcadero Center, Suite 2900, San Francisco, Calif. 94114; (415) 954-5474

Total assets managed	$17,762,000,000
Total discretionary	$17,762,000,000
Total tax-exempt assets	$14,673,000,000
Discretionary tax-exempt	$14,673,000,000
International fixed-income	$90,000,000
Dedicated/immunized assets	$121,000,000
Mortgage-backed assets	$3,200,000,000
Tax-exempt clients	125
Types of accounts managed	CEFG
Minimum separate equity account	$15,000,000
Minimum separate bond account	$20,000,000
Minimum separate balanced	$20,000,000
No. of portfolio managers	10
Size of research staff	15

RCM Capital Management is an active equity, active domestic and international/global fixed-income, balanced and short-term manager.

Its equity approach is to seek out industries and companies growing faster than the market and, through a series of valuation screens and other disciplines, purchase those securities whose growth in earnings and dividends will provide a total return in excess of the market.

Its primary fixed-income approach uses sector analysis and active duration management. Its objective is to achieve consistently superior relative and absolute rates of return in line with client objectives. The firm constantly monitors, balances and quantifies risk.

The asset mix Jan. 1 was 50.7% stocks, 20% bonds, 7.5% cash and 21.8% mortgage-backed securities.

The firm follows 450 stocks closely and more than 1,000, generally; 85% of the research is generated internally.

The parent is Primerica Corp.

Claude N. Rosenberg Jr. is senior partner; Melody L. McDonald is client contact.

Realty Income Advisors
220 W. Crest St., Escondido, Calif. 92025; (800) 854-1967

Total assets managed	$550,000,000
Total discretionary	$550,000,000
Total tax-exempt assets	$49,000,000
Total discretionary tax-exempt	$49,000,000
Equity real estate assets	$49,000,000
Types of accounts managed	C
Minimum separate account	$5,000,000

Realty Income Advisors, a real estate investment adviser, invests in debt-free, single-tenant commercial properties. Property is triple net leased for long-term income production and appreciation.

The asset mix Jan. 1 was 100% equity real estate.

The parent is Realty Income Corp.

William Clark is chief investment officer; Tom A. Lewis is client contact.

Reams Asset Management
P.O. Box 666, Columbus, Ind. 47202; (812) 372-6606

Total assets managed	$1,542,000,000
Total discretionary	$1,542,000,000
Total tax-exempt assets	$1,533,000,000
Total discretionary tax-exempt	$1,533,000,000
Tax-exempt clients	7
Types of accounts managed	CEF
Minimum separate account	$50,000,000
No. of portfolio managers	2
Size of research staff	5

Reams Asset Management is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes security selection; low p/e stocks are favored. Its fixed-income approaches uses interest rate anticipation, seeking long-term total returns.

Options and financial futures are used.

The asset mix Jan. 1 was 29.6% stocks, 61% bonds and 9.4% cash.

The firm follows 100 stocks closely and 250, generally.

Fred W. Reams is chief investment officer; L. Paul Berman is client contact.

W.H. Reaves & Co. Inc.
30 Montgomery St., Jersey City, N.J. 07302; (201) 332-4596

Total assets managed	$959,000,000
Total discretionary	$959,000,000
Total tax-exempt assets	$959,000,000
Total discretionary tax-exempt	$959,000,000
401(k)/457 assets managed	$41,000,000
Tax-exempt clients	33
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	8

W.H. Reaves & Co. Inc., an active equity manager, takes a conservative approach, committed exclusively to investments in electric utilities, natural gas, energy and telecommunication common stocks. It emphasizes capital preservation and low risk.

The asset mix Jan. 1 was 91% stocks and 9% cash.

The firm follows 150 stocks closely and 250, generally; all research is generated internally.

William H. Reaves is chief investment officer; Douglas S. Robertson is client contact.

Reich & Tang L.P.
100 Park Ave., New York, N.Y. 10017; (212) 370-1110

Total assets managed	$5,594,000,000
Total discretionary	$4,912,000,000
Total tax-exempt assets	$1,025,000,000
Total discretionary tax-exempt	$1,025,000,000
Tax-exempt clients	33
Types of accounts managed	CEFG
Minimum separate account	$20,000,000
No. of portfolio managers	4
Size of research staff	1

Reich & Tang L.P. is an active equity, active fixed-income and balanced manager.

Its equity approach is based on value and growth. Through direct fundamental research, the firm seeks to identify superior business franchises that sell at a discount valuation and that have the potential for above-average growth with a minimum of financial and operating risk.

Its fixed-income approach uses interest rate anticipation to establish portfolio maturity; only Treasuries are used.

The asset mix Jan. 1 was 76% stocks and 24% cash.

The firm follows 75 stocks closely and 200, generally; 95% of the research is generated internally.

Robert Hoerle is chief investment officer; Charles Dunn is client contact.

Reid McCoy Inc.
8 E. Hamilton St., Baltimore, Md. 21202; (301) 332-0893

Total assets managed	$83,000,000
Total discretionary	$83,000,000
Total tax-exempt assets	$83,000,000
Total discretionary tax-exempt	$83,000,000
Mortgage-backed assets	$8,000,000
Tax-exempt clients	11
Types of accounts managed	CG
Minimum separate account	$1,000,000
No. of portfolio managers	2

Reid McCoy Inc. is an active fixed-income and short-term cash manager.

It has a top-down approach to asset management. Reviewing first the economy and the direction of interest rates to determine the optimal maturity structure, then improving industries and finally undervalued securities.

The asset mix Jan. 1 was 72% bonds, 12.9% cash, 9.9% mortgage-backed securities and 5.2% asset-backed securities.

Vernon A. Reid is chief investment officer and client contact.

Reimer and Koger Associates Inc.
8500 Shawnee Mission Parkway, Suite 105, Shawnee Mission, Kan. 66202; (913) 236-6700

Total assets managed	$902,000,000
Total discretionary	$902,000,000
Total tax-exempt assets	$805,000,000
Total discretionary tax-exempt	$805,000,000
Tax-exempt clients	34
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	10
Size of research staff	4

Reimer and Koger Associates Inc. is an active equity, active fixed-income, balanced and direct placement manager.

The largest division, core value balanced funds, uses a lower-risk, bottom-up value approach that focuses on quantifying undervalued earnings in a comparative proprietary universe. Buy/sell decisions are made by quantitatively screening 200 issues.

Its fixed-income approach is based on interest rate anticipation, using a duration-based discipline that seeks higher-than-market returns with market risk or less.

Mark E. Evans is chief investment officer; Thomas J. Bash is client contact.

Reiser-Builder/Russell
7 Piedmont Center, Suite 721, Atlanta, Ga. 30305; (404) 233-9576

Total:	
Internal, discretionary	$30,000,000
Assigned to other firms	$40,000,000
Tax-exempt:	
Internal, discretionary	$6,000,000
Assigned to other firms	$33,000,000
401(k)/457 plan assets	$21,000,000
International equities	$6,000,000
Tax-exempt clients	24
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Reiser-Builder/Russell, a manager of managers, offers active equity and fixed-income, balanced, active international/global equity, TAA and venture capital investment management.

Its equity approach seeks stocks with above-average return on capital. Portfolio management is overlayed with a market timing model. Interest rate anticipation is used in fixed income.

The asset mix Jan. 1 was 49% stocks, 35% bonds and 16% cash.

Robert E. Reiser Jr. is chief investment officer and client contact.

Renaissance Investment Management Inc.
1700 Young St., Cincinnati, Ohio 45210; (513) 723-4500

Total assets managed	$1,188,000,000
Total discretionary	$1,111,000,000
Total tax-exempt assets	$1,062,000,000
Total discretionary tax-exempt	$1,013,000,000
401(k)/457 assets managed	$11,000,000
Tax-exempt clients	180
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	9
Size of research staff	2

Renaissance Investment Management Inc. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

Securities generally are limited to high-quality, liquid issues. Tactical asset allocation strategies are emphasized as a means of reducing risk while enhancing returns.

All assets were in stocks Jan. 1.

The firm follows 150 stocks closely and 400, generally; all research is generated internally.

Frank W. Terrizzi is chief investment officer and client contact.

Daniel H. Renberg & Associates Inc.
8383 Wilshire Blvd., Suite 926, Beverly Hills, Calif. 90211; (213) 852-0800

Total assets managed	$135,000,000
Total discretionary	$135,000,000
Total tax-exempt assets	$78,000,000
Total discretionary tax-exempt	$78,000,000
Tax-exempt clients	70
Types of accounts managed	C
Minimum separate account	$500,000
No. of portfolio managers	2

Daniel H. Renberg & Associates Inc. is an active equity and balanced manager.

Its equity approach emphasizes emerging and established growth companies and undervalued/ special situation companies. Investments are selected using fundamental analysis. Fixed-income investments are made for specific portfolio objectives.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 100 stocks closely and 200, generally; 20% of the research is generated internally.

Daniel H. Renberg is chief investment officer; Dan R. Peter is client contact.

Resource Investments Inc.
Trade Center, Box 24, Airport Road, Lebanon, N.H. 03784; (603) 298-7001

Total assets managed	$275,000,000
Total discretionary	$275,000,000
Total tax-exempt assets	$275,000,000
Total discretionary tax-exempt	$275,000,000
Equity real estate assets	$275,000,000
Tax-exempt clients	15
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
Size of research staff	2

Resource Investments Inc. is a real estate manager.

The firm purchases investment-grade industrial forest lands at discounted prices and practices active opportunistic forest management. The real return objective is 8%.

All assets as of Jan. 1 were in equity real estate.

Eric Oddleifson is chief investment officer; Christopher Broom is client contact.

Retirement System Investors
41 E. 42nd St., New York, N.Y. 10017; (212) 503-0160

Total assets managed	$408,000,000
Total discretionary	$408,000,000
Total tax-exempt assets	$408,000,000
Total discretionary tax-exempt	$408,000,000
Mortgage assets	$600,000
Dedicated/immunized assets	$14,000,000
Mortgage-backed assets	$58,000,000
401(k)/457 assets managed	$59,000,000
Tax-exempt clients	92
Types of accounts managed	C
No. of portfolio managers	8
Size of research staff	5

Retirement System Investors Inc. is an active domestic and international equity, active and passive fixed-income, balanced and short-term manager.

In equities, the firm buys a diversified group of high-quality, competitively strong, large-cap companies; securities are selected on earnings growth and dividend prospects, cash flow and asset values relative to their market value.

The fixed-income approach is qualitative and risk averse and uses interest rate anticipation, concentrating on yield curve, sector spreads and credit analysis. It used options and stock index futures.

The parent is Retirement System Group Inc.

James P. Coughlin is chief investment officer; Diane H. Dudzinski client contact.

RhumbLine Advisers Corp.
30 Rowes Wharf, Suite 350, Boston, Mass. 02110 (617) 345-0434

Total assets managed	$5,000,000
Total discretionary	$5,000,000
Total tax-exempt assets	$5,000,000
Total discretionary tax-exempt	$5,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	1

RhumbLine Advisers Corp. is a passive equity manager.

Its equity approach uses index and enhanced index products. The firm utilizes computer screens and models to create customized structured portfolios. Stock index futures are used.

All assets as of Jan. 1 were in equities.

About 5,800 stocks are followed generally; 80% of the research is generated internally.

John A. Denney is chief investment officer; Wayne T. Owen is client contact.

Rice, Hall, James & Associates
1200 Third Ave., Suite 1600, San Diego, Calif. 92101; (619) 239-9005

Total assets managed	$577,000,000
Total discretionary	$577,000,000
Total tax-exempt assets	$250,000,000
Total discretionary tax-exempt	$250,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	30
Types of accounts managed	CEFG
Minimum separate account	$700,000
No. of portfolio managers	7
Size of research staff	3

Rice, Hall, James & Associates is an active equity and balanced manager.

Its equity approach attempts to identify unrecognized values with high-quality earnings and strong balance sheets. It emphasizes long-term fundamental value with good potential for earnings and dividend growth. Its fixed-income approach is protective, using short- to intermediate-term Treasuries and high grade corporates.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

The firm follows 50 stocks closely and 100, generally; 20% of the research is generated internally.

The parent is United Asset Management.

Samuel Trozzo is chief investment officer; H. Michael Collins is client contact.

T.O. Richardson Co. Inc.
11 Main St., P.O. Box 387, Farmington, Conn. 06034; (203) 677-8578

Total assets managed	$70,000,000
Total discretionary	$70,000,000
Total tax-exempt assets	$50,000,000
Total discretionary tax-exempt	$50,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	5
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	4

T.O. Richardson Co. Inc. is an active equity, tactical asset allocation and balanced manager.

Its equity approach is conservative, allocating between cash (money market funds) and growth stock mutual funds based on a proprietary mathematical model.

The asset mix Jan. 1 was 100% stocks.

Samuel Bailey Jr. and John Everets Jr. are chief investment officers and client contacts.

Richmond Capital Management
10800 Midlothian Turnpike, Richmond, Va. 23235; (804) 379-8283

Total assets managed	$1,515,000,000
Total discretionary	$1,515,000,000
Total tax-exempt assets	$1,022,000,000
Total discretionary tax-exempt	$1,022,000,000
Mortgage-backed assets	$102,000,000
Tax-exempt clients	44
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	4

Richmond Capital Management is an active fixed-income and short-term manager.

It uses four elements of fundamental value analysis in its investment approach. Managers avoid market timing by remaining fully invested and relying on active trading of corporate securities.

The asset mix Jan. 1 was 65% bonds, 10% mortgage-backed securities, 5% cash.

Charles E. Keller is chief investment officer; L. David Hale is client contact.

Richter Asset Management
477 Madison Ave., New York, N.Y. 10022; (212) 753-3100

Total assets managed	$46,000,000
Total discretionary	$46,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
International equity assets	$2,000,000
Tax-exempt clients	6
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	1
Size of research staff	1

Richter Asset Management is an active equity and balanced manager.

Its equity approach integrates fundamental analysis and rigorous sell rules. It invests primarily in special situations — well-managed, well-capitalized companies with low p/es. Loss limitation is stressed through use of internally developed, systematic programs.

The asset mix Jan. 1 was 64% stocks and 36% bonds.

The firm follows 75 stocks closely and 150, generally; 75% of research is generated internally.

Morton N. Richter is chief investment officer and client contact.

Riggs Investment Management Corp.
808 17th St. N.W., 11th Floor, Washington, D.C. 20006; (202) 835-6700

Total assets managed	$1,975,000,000
Total discretionary	$1,975,000,000
Total tax-exempt assets	$1,205,000,000
Total discretionary tax-exempt	$1,205,000,000
International equity assets	$23,000,000
International fixed-income	$60,000,000
International cash assets	$250,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	75
Types of accounts managed	CEFG
Minimum separate account	$2,000,000
No. of portfolio managers	8
Size of research staff	2

Riggs Investment Management Corp. is an active equity, active fixed-income, balanced, short-term and tactical asset allocation manager.

Equity investments are value-oriented and characterized by low p/e ratios and above-average earnings growth rates. Fixed-income investments stress value through historical spread analysis. Maturity risk is constrained around portfolio objectives. Quantitative models are used extensively.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

The firm follows 200 stocks closely and 850, generally; 65% of the research is generated internally.

Riggs National Bank of Washington, is the parent.

Robert A. von Pentz is chief investment officer; James J. Angelone is client contact.

Rittenhouse Financial Services Inc.
225 S. 18th St., Philadelphia, Pa. 19103; (215) 254-9600

Total assets managed	$850,000,000
Total discretionary	$838,000,000

Total tax-exempt assets	$391,000,000
Total discretionary tax-exempt	$377,000,000
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	12

Pittenhouse Financial Services Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach tries to locate value in the high-quality, large-cap segment. Consistent earnings and dividends are of utmost importance; average portfolio beta must be below the market. In fixed income, it staggers maturities to a maximum of 10 years, using only high-quality corporate and government issues, and moves along the yield curve to minimize risk and maximize income.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

The firm follows 225 stocks closely and generally; 15% of the research is generated internally.

James S. Morgan is chief investment officer; Bernard A. Francis is client contact.

Roanoke Asset Management

10 E. 53rd St., New York, N.Y. 10022; (212) 759-9097

Total assets managed	$380,000,000
Total discretionary	$380,000,000
Total tax-exempt assets	$380,000,000
Total discretionary tax-exempt	$380,000,000
Tax-exempt clients	57
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	3

Roanoke Asset Management, an active equity manager, uses bottom-up stock selection focusing on companies and industries undergoing a positive fundamental change.

The asset mix Jan. 1 was 98% stocks, 2% cash.

The firm follows 55 stocks closely and 70, generally; 80% of research is generated internally.

Brian J. O'Connor is client contact.

Robshaw & Cheskin Associates Inc.

6245 Sheridan Drive, Suite 218, Amherst, N.Y. 14221; (716) 633-6555

Total assets managed	$92,000,000
Total discretionary	$85,000,000
Total tax-exempt assets	$55,000,000
Total discretionary tax-exempt	$52,000,000
Tax-exempt clients	47
Types of accounts managed	CEFJ
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	3

Robshaw & Cheskin Associates Inc. is an active equity, active fixed income and balanced manager.

Its equity approach uses Graham & Dodd principles to screen growth and emerging stocks, making a fundamental search for superior long-term appreciation potential. Its fixed-income approach is based on analysis of sectors, ratings and maturities, using the yield curve and anticipation shifts in the curve.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

James P. Julian is client contact.

Rock Capital Management

220 Montgomery St., Suite 315, San Francisco, Calif. 94104; (415) 989-2572

Total assets managed	$43,000,000
Total discretionary	$43,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	12
Types of accounts managed	CFJ
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Rock Capital Management, a core equity manager, specializes in managing the risk of clients' portfolios. This is accomplished by long-term investing in industry-leading companies while reducing volatility through options.

Of the discretionary tax-exempt assets above, $25 million is run in an index put and covered call program. All of the underlying assets are managed in-house.

The asset mix Jan. 1 was 60% stocks and 40% bonds.

The firm follows 40 stocks closely and between 800 and 900, generally; 70% of research is generated internally.

Carl L. Rock is chief investment officer; Donald M. Bethe Jr. is client contact.

Rocky Mountain Investors

3200 Cherry Creek South Drive, Denver, Colo. 80209; (303) 777-3200

Total assets managed	$140,000,000
Total discretionary tax-exempt	$140,000,000
Equity real estate assets	$30,000,000
Mortgage assets	$85,000,000
Tax-exempt clients	20
Types of accounts managed	J
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Rocky Mountain Investors, a real estate and short term manager, provides short-term construction loans, participating mortgages and equity investments in union-built real estate projects.

J. Richard Allen is chief investment officer; Robert Lee and Jeff Crawford are client contacts.

Roll and Ross Asset Management Corp.

585 Skippack Pike, Suite 400, Blue Bell, Pa. 19422; (215) 641-1448

Total assets managed	$1,073,000,000
Total discretionary	$1,073,000,000
Total tax-exempt assets	$939,000,000
Total discretionary tax-exempt	$939,000,000
International stocks	$34,000,000
Tax-exempt clients	7
Types of accounts managed	CEG
Minimum separate account	$15,000,000
No. of portfolio managers	4
Size of research staff	5

Roll and Ross Asset Management Corp. is an active domestic and international/global equity manager.

Its equity approach uses quantitative core enhancement. Its policy is to remain fully invested with portfolio turnover controlled to minimize transaction costs. The universe of securities used is based on client objectives.

The asset mix Jan. 1 was 99% stocks and 1% cash.

The firm follows 2,500 stocks closely and 15,000, generally; 90% of research is generated internally.

Stephen Ross is chief investment officer; Alan Yuhas is client contact.

Rosen Associates Management Corp.

333 Jericho Turnpike, Jericho, N.Y. 11566; (516) 822-5350

Total assets managed	$550,000,000
Total discretionary	$550,000,000
Total tax-exempt assets	$550,000,000
Total discretionary tax-exempt	$550,000,000
Equity real estate assets	$525,000,000
Mortgage assets	$25,000,000
Tax-exempt clients	4
Types of accounts managed	C
No. of portfolio managers	5

Rosen Associates Management Corp. is a real estate and shopping center manager.

The firm seeks to maximize cash flows by rehabilitating older and troubled properties through remodeling, re-tenanting and/or re-leasing. The firm also acquires and builds neighborhood and community shopping centers.

The asset mix Jan. 1 was 95% equity real estate and 5% mortgages.

Robert A. Rosen is chief investment officer and client contact.

Rosenberg Institutional Equity Management

4 Orinda Way, Suite 300E, Orinda, Calif. 94563; (415) 254-6464

Total assets managed	$8,197,000,000
Total discretionary	$8,197,000,000
Total tax-exempt assets	$5,513,000,000
Total discretionary tax-exempt	$5,513,000,000
International equity assets	$2,000,000
Tax-exempt clients	39
Types of accounts managed	CEFG
Minimum separate account	$75,000,000
Size of research staff	5

Rosenberg Institutional Equity Management is an active, quantitative domestic and international/global equity manager.

The firm uses proprietary in-house valuation models to analyze fundamental data on 3,700 stocks. It identifies moderately undervalued companies in every sector and constructs efficient portfolios of such stocks.

The asset mix Jan. 1 was 99% stocks and 1% cash.

The firm follows 800 stocks closely and 3,700, generally; 95% of research is generated internally.

Barr Rosenberg is chief investment officer; Marlis S. Fritz is client contact.

The Rothschild Co.

32 South St., Baltimore, Md. 21202; (301) 539-4660

Total assets managed	$856,000,000
Total discretionary	$847,000,000
Total tax-exempt assets	$324,000,000
Total discretionary tax-exempt	$324,000,000
Tax-exempt clients	45
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	1

The Rothschild Co. is an active equity and balanced manager.

Its equity approach is value-oriented, with a bias toward growth, using Graham & Dodd principles. There is an emphasis on convertible securities. Options are used.

Its fixed-income approach is based on the use of convertibles and short-term cash equivalents.

Some 20% of the research is generated internally.

The parent is United Asset Management.

Stanford Z. Rothschild Jr., Joseph M. Winkler and F. James Knittle are chief investment officers; Lee Raskin is client contact.

N.M. Rothschild International Asset Management Ltd.

5 Arrows House, St. Swithin's Lane, London, U.K. EC4P 4DU; 71-280-5000

Total assets managed	$807,000,000
Total discretionary	$438,000,000
Total tax-exempt assets	$448,000,000
Total discretionary tax-exempt	$448,000,000
International equity assets	$420,000,000
International fixed-income	$28,000,000
Tax-exempt clients	5
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	13

N.M. Rothschild International Asset Management Ltd. is an active domestic and international equity and fixed-income, balanced and currency overlay manager.

Its equity approach seeks to add value in market, stock and currency selection. Concentrated and active asset allocation and market selection are stressed through fundamental economic analysis.

Its fixed-income approach is market rotation, using interest rate anticipation and currency and instrument management. Value is added through maturity, yield curve and market switches.

In addition to the assets above, the firm runs two currency overlay programs on $1.723 billion of discretionary tax-exempt assets; it does not manage the underlying assets. One overlay program uses a fully hedged benchmark; the other program uses an unhedged benchmark.

The asset mix Jan. 1 was 93.8% international stocks and 6.2% international bonds.

The firm follows 150 stocks closely and 250, generally; 50% of the research is generated internally.

The parent is N.M. Rothschild Asset Management Ltd.

Nigel Wightman is chief investment officer; Suzanne Schecter is client contact.

Roulston & Co. Inc.

4000 Chester Ave., Cleveland, Ohio 44103; (216) 431-3000

Total assets managed	$700,000,000
Total discretionary	$500,000,000
Total tax-exempt assets	$300,000,000
Total discretionary tax-exempt	$300,000,000
Tax-exempt clients	250
Types of accounts managed	CEFJ
Minimum separate account	$100,000
No.of portfolio managers	5
Size of research staff	35

Roulston & Co. Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach focusses on value equities whose management has historically demonstrated a commitment to the stockholder, and which stand up to rigorous research.

Its fixed-income approach is based on interest rate anticipation. The portfolios typically hold U.S. Treasury issues, although agencies and especially attractive corporates may be used.

The firm follows 250 stocks closely and 500 generally; 75% of research is generated internally.

Joseph A. Harrison is chief investment officer; Thomas H. Roulston is client contact.

Roxbury Capital Management

1800 Avenue of the Stars, Suite 1100, Los Angeles, Calif. 90067; (213) 282-0820

Total assets managed	$287,000,000
Total discretionary	$287,000,000
Total tax-exempt assets	$183,000,000
Total discretionary tax-exempt	$183,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	48
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	3

Roxbury Capital Management, offering active equity and balanced accounts, is a growth equity manager. Selected stocks meet the firm's criteria for value, return potential and low downside risk.

The asset mix Jan. 1 was 55% stocks, 28% fixed income and 19% cash.

The firm follows 50 stocks closely and 100, generally; 70% of research is generated internally.

Anthony H. Browne is chief investment officer; Fairfield Capital Associates, Westport, Conn., is client contact.

RPI Institutional Services

275 Madison Ave., New York, N.Y. 10016; (212) 986-7510

Total assets managed	$122,000,000
Total discretionary	$6,000,000
Total tax-exempt assets	$122,000,000
Total discretionary tax-exempt	$6,000,000
Tax-exempt clients	3
Types of accounts managed	E
Minimum separate account	$5,000,000
No. of portfolio managers	4

RPI Institutional Services Inc. originates and manages direct oil and gas investments.

The firm seeks and negotiates investment opportunities directly with oil and gas operators, both for acquiring interests in properties alongside the operator and for funding internal projects.

The asset mix Jan. 1 was 100% oil and gas direct investments.

Robert C. Metzger is chief investment officer; Kenneth A. Mankin is client contact.

The RREEF Funds

650 California St., Suite 1800, San Francisco, Calif. 94108; (415) 781-3300

Total assets managed	$4,361,000,000
Total discretionary	$3,201,000,000
Total tax-exempt assets	$4,291,000,000
Total discretionary tax-exempt	$3,201,000,000
Equity real estate assets	$3,142,000,000
Mortgage assets	$59,000,000
Tax-exempt clients	101
Types of accounts managed	CGJ
Minimum separate account	$100,000,000
No. of portfolio managers	18
Size of research staff	6

The RREEF Funds, a real estate manager, invests in high-quality equity real estate to provide its clients with diversification and superior returns. RREEF directly manages its properties to maximize value.

The asset mix Jan. 1 was 97% equity real estate and 3% mortgages.

Donald A. King Jr. is managing partner; Stephen M. Steppe is client contact.

Ruane, Cunniff & Co. Inc.

1370 Avenue of the Americas, New York, N.Y. 10019; (212) 245-4500

Total assets managed	$2,229,000,000
Total discretionary	$2,229,000,000
Total tax-exempt assets	$1,151,000,000
Total discretionary tax-exempt	$1,151,000,000
Tax-exempt clients	100
Types of accounts managed	CEF
No. of portfolio managers	3
Size of research staff	3

Ruane, Cunniff & Co. Inc., an active equity manager, emphasizes Graham & Dodd analysis.

The firm is not accepting new accounts.

The asset mix Jan. 1 was 61% stocks and 39% cash.

The firm follows 50 stocks closely and 300, generally; all research is generated internally.

William J. Ruane is chief investment officer.

Frank Russell Trust Co.

909 A St., P.O. Box 1454, Tacoma, Wash. 98401; (206) 572-2282

Total discretionary tax-exempt	$9,600,000,000
Assigned to other firms	$9,600,000,000

Frank Russell Trust Co. is a manager of managers, offering a series of 15 pooled funds. All assets are managed in commingled funds on its behalf by external investment advisers. Options and financial futures are used.

The core equity fund employs earnings-growth, market-oriented and price-driven styles. Two other equity funds concentrate on market timing and small-cap issues.

Five international funds are offered: a broadly diversified non-U.S. fund; a Pacific Basin fund; an emerging markets fund; a South Africa-free fund; and a new fund focusing on investment opportunities in Europe.

Three pooled fixed-income funds cover long-term, intermediate and short-term strategies. The company also offers a GIC pooled fund that is an open-end fund that guarantees principal and is market responsive.

The tactical asset allocation fund is a quantitatively based asset mix rebalancing strategy. The fund attempts to exploit the changing relative attractiveness among asset classes. The private partnerships fund invests in a number of different partnerships that use specialty investment approaches, such as hedging, informational short-selling and risk arbitrage.

The firm offers six open-end and four closed-end real estate funds diversified by property type, size, region, investment structuring, lease maturities and manager style.

The parent is Frank Russell Co.

Virginia Sirusas, (212) 486-7744, is client contact.

RXR Capital Management

30 Buxton Farm Road, Suite 116, Stamford, Conn. 06905; (203) 323-5015

Total assets managed	$400,000,000
Total discretionary	$400,000,000
Total tax-exempt assets	$72,000,000
Total discretionary tax-exempt	$72,000,000
Tax-exempt clients	3
Types of accounts managed	CG
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	5

RXR Capital Management is an active derivatives manager in balanced, cash and tangible/global management.

Its approach uses a systematic options strategy designed to provide significant hedge protection in declining markets, substantial participation in rising markets and enhanced yield during trendless periods. It uses options and financial futures.

The asset mix Jan. 1 was 28% stocks, 42% bonds, 20% cash and 10% tangible/global assets.

The firm generates 95% of its research internally.

The parent is The RXR Group.

James McConnon is chief investment officer; Christopher E. Deskins is client contact.

Ryan Labs Inc.

350 Albany St., PH2, New York, N.Y. 10280; (212) 945-2300

Total assets managed	$727,000,000
Total discretionary	$727,000,000
Total tax-exempt assets	$727,000,000
Total discretionary tax-exempt	$727,000,000
Fixed-income indexed assets	$727,000,000
Tax-exempt clients	6
Types of accounts managed	CG
Minimum separate account	$20,000,000
No. of portfolio managers	2
Size of research staff	5

Ryan Labs Inc. is an active and passive fixed-income manager, manages structured portfolios. Its investment approach is low risk/cost.

The asset mix Jan. 1 was 100% bonds.

Mark Allamus is chief investment officer; Ronald J. Ryan is the client contact.

S

Sabl Well Investment Counsel

2444 Wilshire Blvd., Suite 500, Santa Monica, Calif. 90403; (213) 828-4240

Total assets managed	$225,000,000
Total discretionary	$59,000,000
Total tax-exempt assets	$88,000,000
Total discretionary tax-exempt	$24,000,000
International equity assets	$2,000,000
Tax-exempt clients	15
Types of accounts managed	CEF
No. of portfolio managers	2

Sabl Well Investment Counsel is an active equity and balanced manager.

The firm uses growth stocks and Graham & Dodd analysis, combining growth and value stocks to get the best of both. In balanced accounts, its fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 72% stocks, 14.5% bonds and 13.5% cash.

The firm follows 50 stocks closely and 150, generally; 40% of research is generated internally.

Frederick M. Sabl is chief investment officer; Ralph E. Well is client contact.

Ronald Sadoff's Major Trends

250 W. Coventry Court, Milwaukee, Wis. 53217; (414) 352-8460

Total assets managed	$68,000,000
Total discretionary	$68,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	60
Types of accounts managed	CFJ
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

Ronald Sadoff's Major Trends is an active and passive equity, passive fixed-income, balanced and tactical asset allocation manager.

Its equity approach combines Graham & Dodd analysis with growth, emerging growth and low p/e stocks. Its low-risk, high-potential, top-down approach focuses on leading industries and companies emerging from long-term downtrends that possess value and growth potential.

Its top-down fixed-income approach uses interest rate anticipation and credit analysis.

The asset mix Jan. 1 was 25% stocks, 50% bonds and 25% cash.

The firm follows 65 stocks closely and 350, generally; 95% of the research is generated internally.

Ronald Sadoff, president, is chief investment officer and client contact.

SAFECO Asset Management

SAFECO Plaza, T-14, Seattle, Wash. 98185; (206) 545-3496

Total assets managed	$1,697,000,000
Total discretionary	$1,697,000,000
Total tax-exempt assets	$686,000,000
Total discretionary tax-exempt	$686,000,000
Tax-exempt clients	12
Types of accounts managed	CEFJ
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	10

SAFECO Asset Management Co. is an active equity, active fixed-income and balanced manager.

In equities, the firm is a fundamental, research-oriented investor using traditional valuation techniques to establish a significant margin of safety relative to price. Its active duration fixed-income approach uses intermediate-term securities.

The asset mix Jan. 1 was 45% stock, 50% bonds and 5% cash.

The firm follows 500 stocks closely and 1,200, generally; 60% of the research is generated internally.

The parent is SAFECO Corp.

Eugene D. Hokin is chief investment officer; M. Tucker Grills is client contact.

Salem Capital Management

200 Unicorn Park Drive, Woburn, Mass. 01801; (617) 932-9005

Total assets managed	$123,000,000
Total discretionary	$123,000,000
Total tax-exempt assets	$82,000,000
Total discretionary tax-exempt	$82,000,000
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	2

Salem Capital Management Inc. is an active equity, active bond and balanced manager.

Its equity approach is value-oriented and uses sector rotation. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 25% stocks, 60% bonds and 15% cash.

The firm follows 40 stocks closely; 20% of the research is generated internally.

Henry W. Cook III is chief investment officer and client contact.

Real estate directory: Sept. 16.

Salomon Brothers Asset Management Inc.

7 World Trade Center, New York, N.Y. 10048; (212) 783-7000

Total assets managed	$6,107,000,000
Total discretionary	$4,407,000,000
Total tax-exempt assets	$196,000,000
Total discretionary tax-exempt	$196,000,000
Tax-exempt clients	52

Salomon Brothers Asset Management Inc. is an active equity, active domestic and international/global fixed-income, short-term, mortgage, convertible, high yield and balanced manager.

Its equity approach emphasizes derivative securities and quantitative analysis to identify market inefficiencies and undervalued situations.

Its fixed-income approach uses quantitative analysis to identify market sectors and individual securities that are undervalued and that have the best opportunities to outperform the market.

The parent is Salomon Inc.

Michael F. Holland is chief investment officer and client contact.

Fayez Sarofim & Co.

2 Houston Center, Suite 2907, Houston, Texas 77010; (713) 654-4484

Total assets managed	$17,615,000,000
Total discretionary	$16,282,000,000
Total tax-exempt assets	$14,463,000,000
Discretionary tax-exempt	$14,090,000,000
Tax-exempt clients	372
Types of accounts managed	CEFGJ
No. of portfolio managers	14

Fayez Sarofim & Co. is an active equity, active domestic and international/global fixed-income, balanced and short-term manager.

Its equity approach focuses on growth in earnings and earning power. Fundamental economic and company analysis are the foundation of a top-down, flexible process. Current emphasis is on larger-cap companies with highly predictable earnings growth and market multiple.

Its fixed-income approach is keyed to timely shifts in maturity as dictated by the interest rate outlook and is subject to specified minimum return objectives.

The asset mix Jan. 1 was 88.6% stocks, 10.2% bonds and 1.2% cash.

The firm follows 70 stocks closely and 400, generally; 80% of the research is generated internally.

Fayez Sarofim is chief investment officer; James A. Reynolds is client contact.

M.D. Sass Investors Services Inc.

1133 Avenue of the Americas, New York, N.Y. 10036; (212) 730-2000

Total assets managed	$2,778,000,000
Total discretionary	$2,778,000,000
Total tax-exempt assets	$1,695,000,000
Total discretionary tax-exempt	$1,695,000,000
Equity real estate assets	$90,000,000
Dedicated/immunized assets	$200,000,000
Mortgage-backed assets	$678,000,000
Tax-exempt clients	79
Types of accounts managed	CJGJ
Minimum separate account	$10,000,000
No. of portfolio managers	12

M.D. Sass Investors Services Inc. is an active equity and fixed-income, balanced, real estate and short-term manager.

Its equity approach is value-oriented and uses sector rotation. Its fixed-income approach uses sector analysis. Options are used.

Its real estate approach is to purchase quality property in distressed markets that are recovering.

Some $55 million is run in a hedged arbitrage strategy, for which Sass manages the underlying assets.

The firm follows 400 stocks closely and more than 70, generally; 50% of research is generated internally.

Martin D. Sass is chief investment officer; Richard J. Burns Jr. is client contact.

SBC Portfolio Management International Inc.

1 World Trade Center, Suite 8935, New York, N.Y. 10048; (212) 432-8900

Total assets managed	$581,000,000
Total discretionary	$581,000,000
Total tax-exempt assets	$450,000,000
Total discretionary tax-exempt	$450,000,000
International equity assets	$440,000,000
International fixed-income	$10,000,000
401(k)/457 assets managed	$30,000,000
Tax-exempt clients	31
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	56

SBC Portfolio Management International Inc. is an active international/global equity and fixed-income manager.

Its equity approach is top-down/bottom-up, relying on superior information to make strong bets against the EAFE, when prudent, while investing across the entire index. Currencies are actively managed. Its fixed-income approach primarily makes market selection in local terms, followed by active currency management and performance enhancement using swap techniques.

The firm runs $16 million in capital flows and interest rate forecasting overlay strategies, for which it manages all of the underlying assets.

The asset mix Jan. 1 was 98% stocks and 2% bonds.

The firm follows 120 stocks closely and 300, generally; 75% of research is generated internally.

The parent is Swiss Bank Corp.

Peter J. Morant is chief investment officer; John W. Conlin is client contact.

Sceptre Investment Counsel

26 Wellington St. E., Toronto, Ontario M5E IW4; (416) 367-9898

Total assets managed	$5,149,000,000
Total discretionary	$5,149,000,000
Total tax-exempt	$4,770,000,000
Total discretionary tax-exempt	$4,770,000,000
For subsidiaries of U.S. firms	$1,066,000,000
Non-North American equities	$286,000,000
Tax-exempt clients	141
U.S. subsidiaries	32
Types of accounts managed	CEFGU
Minimum separate account	$25,000,000
No. of portfolio managers	13

Sceptre Investment Counsel Ltd., a Canadian firm, is an balanced manager.

Its equity approach is market timing/tactical asset allocation using sector rotation and value approaches. Emphasis is on industry rotation and security selection. Only high-quality issues are selected, based on product/services, strong management and financial strength. Its fixed-income approach is based on interest rate anticipation and uses bonds with optional maturity dates. Bond selection activity is based on the philosophy that bonds should be the conservative reservoir within a balanced fund.

The asset mix Jan. 1 was 31% Canadian equities, 6% U.S. equities, 51% bonds, 6% cash, and 6% non-North American equities.

Doug Grant is chief investment officer; William J. Saunderson is client contact.

Schabacker Investment Management Inc.

15245 Shady Grove Road, Rockville, Md. 20850; (301) 840-0301

Total assets managed	$159,000,000
Total discretionary	$159,000,000
Total tax-exempt assets	$37,000,000
Total discretionary tax-exempt	$37,000,000
International equity assets	$12,000,000
International fixed-income	$8,000,000
International cash assets	$7,000,000
Equity indexed assets	$2,000,000
Fixed-income indexed assets	$8,000,000
Tax-exempt clients	45
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	4

Schabacker Investment Management Inc. is an active domestic and international equity and fixed-income, balanced, tactical asset allocation, short-term and mutual fund manager.

A top-down equity approach is used to determine the sectors that will perform best given the stock market and economic conditions. Mutual funds are used to implement the strategy. Its fixed-income approach is interest rate anticipation.

The asset mix Jan. 1 was 45% stocks, 25% bonds and 30% cash.

The firm follows 50 stocks closely and 90, generally; 60% of the research is generated internally.

James M. Schabacker is chief investment officer; Nancy E. Wyatt is client contact.

Schaenen Wood & Associates Inc.

630 Madison Ave., New York, N.Y. 10022; (212) 319-3666

Total assets managed	$860,000,000
Total discretionary	$860,000,000
Total tax-exempt assets	$658,000,000
Total discretionary tax-exempt	$658,000,000
401(k)/457 assets managed	$45,000,000
Tax-exempt clients	86
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	6

Schaenen Wood & Associates Inc. is an active equity, active fixed-income, balanced and convertible manager.

Its equity approach follows a risk-averse value orientation, focusing on low p/e stocks with an emphasis on capital preservation. Proprietary screens are used to isolate companies with strong fundamentals; stocks with strong upside potential are identified. Convertibles are used to temper risk.

Its fixed-income approach is conservative, investing primarily in U.S. government securities of short to intermediate maturity. Portfolio average maturities are adjusted according to interest rate trends.

The asset mix Jan. 1 was 54% stocks, 32% bonds and 14% cash.

The firm follows 50 stocks closely and 200, generally; 25% of the research is generated internally.

Gary W. Wood is chief investment officer; William R. Bullion is client contact.

Schroder Capital Management International

787 Seventh Ave., New York, N.Y. 10019; (212) 841-3838

Total assets managed	$4,089,000,000
Total discretionary	$4,089,000,000
Total tax-exempt assets	$3,304,000,000
Total discretionary tax-exempt	$3,304,000,000
International equity assets	$2,993,000,000
International fixed-income	$15,000,000
International cash assets	$296,000,000
Tax-exempt clients	39
Types of accounts managed	CEFG
Minimum separate account	$25,000,000
No. of portfolio managers	9
Size of research staff	63

Schroder Capital Management International is an active manager of international/global equity and fixed-income.

Its equity approach begins with country allocation based on two-year economic projections. Within each country, the focus is on growth stocks. Fixed-income is used as a limited tactical alternative.

The asset mix Jan. 1 was 91% stocks, 9% cash.

The firm follows 700 stocks closely and 6,000, generally; 80% of research is generated internally.

The parent is Schroders PLC.

Richard R. Foulkes is chief investment officer; Sharon L. Haugh is client contact.

Schroder Real Estate Associates

437 Madison Ave., New York, N.Y. 10022; (212) 486-9800

Total assets managed	$1,150,000,000
Total discretionary	$400,000,000
Total tax-exempt assets	$500,000,000
Total discretionary tax-exempt	$400,000,000
Equity real estate assets	$340,000,000
Mortgage assets	$60,000,000
Tax-exempt clients	22
Types of accounts managed	CFG
Minimum separate account	$50,000,000
No. of portfolio managers	3
Size of research staff	1

Schroder Real Estate Associates, a real estate manager, acquires underperforming or underused properties that will respond to its direct, intense property and construction management. Properties are sold upon creation of optimal incremental value.

The asset mix Jan. 1 was 85% equity real estate and 15% mortgages.

Norman L. Peck is chief investment officer; John Emmanuel and Linda Wooldridge are client contacts.

Schroder Ventures Inc.

787 Seventh Ave., 29th Floor, New York, N.Y. 10019; (212) 841-3889

Total assets managed	$1,400,000,000
Total discretionary	$1,400,000,000
Total tax-exempt assets	$112,000,000
Total discretionary tax-exempt	$112,000,000
Types of accounts managed	CEFG
Minimum separate account	$1,000,000

Schroder Ventures Inc. is a global venture capital and management buy-outs/buy-ins manager.

It makes private equity investments in start-up companies or as investments in or to purchase private and public companies to mature operationally and financially until they can be taken public and sold.

The asset mix Jan. 1 was 100% private equity investments.

The parent is Schroders PLC.

Nicholas E.H. Ferguson is chief investment officer; Neal J. Howe is client contact.

Schuylkill Capital Management

1529 Walnut St., 6th Floor, Philadelphia, Pa. 19102; (215) 567-3930

Total assets managed	$25,000,000
Total discretionary	$20,000,000
Total tax-exempt assets	$15,000,000
Total discretionary tax-exempt	$10,000,000
International equity assets	$4,000,000
401(k)/457 assets managed	$4,000,000
Tax-exempt clients	6
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	1

Schuylkill Capital Management is an active domestic and international/global equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, using growth stocks and Graham & Dodd analysis. Value is defined as low relative and historical p/e and high return on equity by industry specific comparison. Its fixed-income approach uses interest rate anticipation and sector analysis. Quality, maturity, coupon and liquidity are key considerations.

The asset mix Jan. 1 was 55% stocks, 30% bonds and 15% cash.

The firm follows 75 stocks closely and 30 generally; 20% of the research is generated internally.

Howard A. Trauger is chief investment officer and client contact.

SCI Securities Counselors of Iowa

307 N. Michigan Ave., Suite 600, Chicago, Ill. 60601; (312) 332-2[illegible]

Total assets managed	$737,000,000
Total discretionary	$737,000,000
Total tax-exempt assets	$536,000,000
Total discretionary tax-exempt	$536,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	356
Types of accounts managed	CEF

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	5

SCI Securities Counselors of Iowa is an active equity, active fixed-income and balanced manager.

Its equity approach combines growth and low p/e stocks, sector rotation and quantitative methods, emphasizing balance-sheet quality.

Its primary fixed-income approach is based on interest rate anticipation and stresses active management of credit, quality, maturity, distribution, coupon, sector allocation, issue selection and diversification.

The asset mix Jan. 1 was 78% stocks and 22% cash.

The firm follows 80 stocks closely and 2,000, generally; 95% of the research is generated internally.

The parent is SCI Financial Group Inc.

John N. Knapp is chief investment officer; Myron R. Holman is client contact.

Scimitar North American Asset Management Inc.

10 Liberty Square, Boston, Mass. 02109; (617) 482-8877

Total assets managed	$250,000,000
Total discretionary	$250,000,000
Total tax-exempt assets	$205,000,000
Total discretionary tax-exempt	$205,000,000
Tax-exempt clients	16
Types of accounts managed	CFG
Minimum separate account	$1,000,000
No. of portfolio managers	8

Scimitar North American Asset Management Inc. is an active equity, active fixed-income, balanced and active international/global equity manager.

Its equity approach is traditional and value-oriented. Value is identified by first using a top-down approach in the analysis of economic, political and market trends. The firm's philosophy is global in scope as it relates to domestic equity selections.

Its fixed-income approach is top-down, using economic research to forecast changes and direction of inflation and interest rates. Emphasis is placed on active maturity allocation between cash instruments and the intermediate or long sectors. Capital preservation is stressed.

The asset mix Jan. 1 was 50% stocks and 50% bonds.

The firm follows 50 stocks closely and 125, generally; 65% of the research is generated internally.

The parent is Scimitar Asset Management Ltd., a unit of Standard Chartered PLC.

Eric H. Jostrom is chief investment officer; Robert P. Caccia is client contact.

SCN Capital Management

1401 Main St. M2, Columbia, S.C. 29226; (803) 765-3727

Total assets managed	$679,000,000
Total discretionary	$679,000,000
Total tax-exempt assets	$679,000,000
Total discretionary tax-exempt	$679,000,000
Mortgage-backed assets	$35,000,000
401(k)/457 assets managed	$155,000,000
Tax-exempt clients	8
Types of accounts managed	CEFJ
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	8

SCN Capital Management Corp. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

Its equity approach uses a quantitative valuation system with a multifactor model determining undervalued and overvalued securities. Portfolio risks are strictly controlled.

Its fixed-income approach uses sector rotation, diversifying among Treasuries, agencies, corporates and mortgage-backed securities.

The asset mix Jan. 1 was 58.4% stocks; 31.9% bonds; 2.1% cash and 7.6% mortgage-backed securities.

The firm follows 1,000 stocks closely; 50% of the research is generated internally.

The parent is South Carolina National Corp.

Herschel C. Pittenger is chief investment officer and client contact.

Scudder, Stevens & Clark

345 Park Ave., New York, N.Y. 10154; (212) 326-6200

Total assets managed	$49,812,000,000
Total discretionary	$49,812,000,000
Total tax-exempt assets	$10,904,000,000
Discretionary tax-exempt	$10,904,000,000
International equity assets	$800,000,000
International fixed-income	$320,000,000
International cash assets	$80,000,000
Dedicated/immunized assets	$110,000,000
Mortgage-backed assets	$1,580,000,000
Tax-exempt clients	581
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	53
Size of research staff	55

Scudder, Stevens & Clark is an active domestic and international/global equity and fixed-income, balanced and short-term manager.

Its domestic equity investment styles include growth, small company and real estate, yield and value. International styles include non-U.S., global, Pacific Basin and emerging markets. Fundamental analysis is emphasized.

Its fixed-income styles, which range from short- to long-term, emphasize value in terms of both maturity and security selection.

Options are used.

The asset mix Jan. 1 was 25.8% stocks, 47.8% bonds, 12.3% cash, and 14.4% mortgage-backed securities.

The firm follows 500 stocks closely and 1,200, generally; 95% of the research is generated internally.

Edmond D. Villani is chief investment officer; Victoria J. Herget, David E. Honeyman Jr., Lee Raker and Emily Smith are client contacts.

Seaboard Investment Advisers

800 Town Point Center, 150 Boush St., Norfolk, Va. 23510; (804) 640-7300

Total assets managed	$345,000,000
Total discretionary	$345,000,000
Total tax-exempt assets	$242,000,000
Total discretionary tax-exempt	$242,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	72
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	2

Seaboard Investment Advisers is an active equity, active fixed-income, balanced, short-term and tactical asset allocation manager.

Its equity approach uses macroeconomic trend analysis to determine asset allocation and, combined with cyclical analysis, to identify appropriate sector exposures. Its fixed-income approach stresses absolute, positive return that is enhanced through sector exposure, yield curve analysis and duration management. Options are used.

The asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash.

The firm follows 75 stocks closely and 750, generally; 75% of the research is generated internally.

Eugene W. Hansen is chief investment officer; Stewart M. Powers Jr. is client contact.

Seamark Asset Management

1801 Hollis St., Suite 310, Halifax, Nova Scotia, B3J 3N4; (902) 423-9367

Total assets managed	$220,000,000
Total discretionary	$220,000,000
Total tax-exempt	$205,000,000
Total discretionary tax-exempt	$205,000,000
For subsidiaries of U.S. firms	$1,000,000
Tax-exempt clients	18
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	3

Seamark Asset Management Ltd., formerly Elliott & Page Atlantic Ltd., a Canadian firm, is an active equity, active-fixed income and balanced manager.

Its bottom-up equity approach is value-oriented, focusing on the ability of management, balance sheet strength and growth opportunity. Fixed-income is managed according to the firm's intermediate and secular view of interest rates.

The asset mix Jan. 1 was 35% Canadian stocks, 10% U.S. stocks, 45% bonds and 10% cash.

G. Peter Marshall is chief executive officer and client contact.

Sears Investment Management Co.

55 W. Monroe St., Suite 3200, Chicago, Ill. 60603; (312) 875-0450

Total assets managed	$4,987,000,000
Total discretionary	$4,987,000,000
Total tax-exempt assets	$4,987,000,000
Total discretionary tax-exempt	$4,987,000,000
Equity indexed assets	$937,000,000
Tax-exempt clients	2
Types of accounts managed	C

Sears Investment Management Co. is an active and passive equity, active fixed-income, balanced, short-term and venture capital manager.

Its equity approach focuses on emerging growth and growth stocks using quantitative techniques. Its fixed-income approach uses interest rate anticipation. Options and stock index futures are used.

The asset mix Jan. 1 was 40.9% stocks, 31.3% bonds, 26% cash and 1.8% venture capital.

The parent is Sears, Roebuck & Co.

David V. Dootson is chief investment officer and client contact.

Seattle Capital Management

P.O. Box 3586 (CSC 8), Seattle, Wash. 98124; (206) 358-3264

Total assets managed	$2,915,000,000
Total discretionary	$2,103,000,000
Total tax-exempt assets	$831,000,000
Total discretionary tax-exempt	$831,000,000
Dedicated/immunized assets	$20,000,000
Mortgage-backed assets	$116,000,000
401(k)/457 assets managed	$274,000,000
Tax-exempt clients	28
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	4

Seattle Capital Management Co. is an active and passive bond and short-term cash manager.

Its uses a value-oriented investment approach with special money market and mortgage-backed security expertise. A core portfolio of undervalued, high-quality securities is used, around which the firm actively rotates sectors and moderately market times.

The asset mix Jan. 1 was 60% bonds, 1% cash, 14% mortgaged-backed securities and 25% asset-backed securities.

The parent is SeaFirst Bank, which is owned by Bank of America.

Kenneth D. Schultz is chief investment officer; Niki M. [illegible]des is client contact.

Securities Coun[illegible]

303 N. Rose, Suite 50[illegible]00, Mich. 49007; (616)

Total assets managed	$3,900,000,000
Total discretionary	$3,868,000,000
Total tax-exempt assets	$1,429,000,000
Total discretionary tax-exempt	$1,427,000,000
401(k)/457 assets managed	$294,000,000
Tax-exempt clients	73
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	16
Size of research staff	2

Securities Counsel Inc. is an active equity, active and passive bonds, balanced and short-term manager.

Its equity approach uses growth stocks. The computer model is driven by earnings and price momentum, coupled with an economic overlay and fundamental analysis of companies.

Its fixed-income approach relies on interest rate anticipation. Accordingly, duration deviation strategies are implemented. Sector analysis and active trading of spread relationships between sectors are used.

Options are used.

The firm follows 100 stocks closely and 550, generally; 40% of research is generated internally.

The parent is First of America Bank Corp.

Victor J. Melone is chief investment officer; Susan M. Carter is client contact.

Security Capital Management Inc.

70 Seaview Ave., Stamford, Conn. 06902; (203) 964-9411

Total assets managed	$1,136,000,000
Total discretionary	$1,136,000,000
Total tax-exempt assets	$972,000,000
Total discretionary tax-exempt	$972,000,000
International fixed-income	$124,000,000
Fixed-income indexed assets	$972,000,000
401(k)/457 assets managed	$13,000,000
Tax-exempt clients	14
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	1

Security Capital Management Inc. is a domestic and international enhanced fixed-income index manager that capitalizes on the misvaluation of futures and options as a means of providing incremental return.

The asset mix Jan. 1 was 100% bonds.

Robert C. Brewer is chief investment officer and client contact.

Security Pacific Investment Group

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1236

Total assets managed	$25,120,000,000
Total discretionary	$23,025,000,000
Total tax-exempt assets	$10,634,000,000
Total discretionary tax-exempt	$7,733,000,000
Equity real estate assets	$60,000,000
Mortgage assets	$100,000,000
International equity assets	$12,000,000
International fixed-income	$3,000,000
International cash assets	$15,000,000
Fixed-income indexed assets	$70,000,000
Mortgage-backed assets	$390,000
401(k)/457 assets managed	$809,000,000
Tax-exempt clients	550
Types of accounts managed	CEF
No. of portfolio managers	57
Size of research staff	15

Security Pacific Investment Group, through its subsidiaries, is an active equity, active fixed-income, balanced, real estate, short-term and active international/global equity and fixed-income manager.

The parent is Security Pacific National Bank.

Edward G. Hartmann is chief investment officer; Norman J. Wohlken is client contact.

The assets of the following subsidiaries are reflected in the figures above.

ACA Capital Management managed $134 million in U.S. institutional discretionary tax-exempt assets in its active, value-oriented (low p/e) approach.

Paul A. Woods is chief investment officer; Mr. Wohlken is client contact.

Financial Management and Trust Services managed $1.872 billion in discretionary institutional U.S. tax-exempt assets in active equity, active and passive fixed-income, balanced, real estate, active international/global fixed-income and short-term investments.

Its equity approach offers growth, emerging growth and blue-chip growth stock strategies. Its fixed-income approach uses duration and index management. For real estate portfolios, investment-grade properties are selected, emphasizing income stability. The firm's focus is on multiple family and commercial properties in the western U.S.

Berthal A. Downey III is chief investment officer; David Doten is client contact at (213) 345-6385.

InterCash Capital Advisors managed $1.267 billion in U.S. institutional discretionary tax-exempt assets in active fixed-income accounts. Its strategy is to actively manage assets, emphasizing sectors, yield curve shifts, specific issues and duration shifts.

James Miller is chief investment officer; William Hibechman is client contact at (213) 229-1188.

Pacific Century Advisers Inc. managed $114 million in U.S. institutional discretionary tax-exempt assets in active equity and fixed-income investments.

Its equity approach concentrates on small-cap emerging growth companies, with increasing earnings and price momentum. Its fixed-income strategy focuses on convertible instruments with a growth bias and uses income to reduce risk.

Jeffrey Meiet is chief investment officer; Richard Wimbish is client contact at (213) 229-1178.

Security Pacific Investment Managers Inc. manages $3.918 billion in U.S. institutional discretionary tax-exempt assets in active equity, active fixed-income and balanced accounts.

Its equity style is growth oriented, emphasizing a top-down approach. Its fixed-income strategy uses interest rate anticipation and sector rotation to enhance value relative to a benchmark by picking undervalued sectors and issues.

Robert U. Sandroni is chief investment officer-equity; R. James Miller is chief investment officer-fixed-income; Mr. Wohlken is client contact.

Sumitrust Security Pacific Investment Managers Inc. managed $27 million in discretionary tax-exempt assets for U.S. clients in active Japanese equities. Value is added through stock selection based upon earnings estimate revisions.

Yukihiro Asano is chief investment officer; Mr. Wolhken is client contact.

Security Pacific Investment Managers Inc.

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1300

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Security Pacific Real Estate Advisors

9333 Genesee, Suite P-25, San Diego, Calif. 92121; (619) 458-2856

Total assets managed	$160,000,000
Total discretionary assets	$160,000,000
Total tax-exempt assets	$160,000,000
Total discretionary tax-exempt	$160,000,000
Real estate equity assets	$12,000,000
Mortgage assets	$148,000,000
Tax-exempt clients	10
Types of accounts managed	CJ
Minimum separate account	$10,000,000

Security Pacific Real Estate Advisors, a real estate manager, invests primarily in first-mortgage loans on new income-producing real estate in California and Nevada. The firm's emphasis is on union-built projects for Taft-Hartley clients.

The asset mix Jan. 1 was 8% equity real estate and 92% mortgages.

The parent is Security Pacific National Bank.

Donald R. Maerscher is chief investment officer and client contact.

Security Trust Co.

2 N. Charles St., Columbia, Md. 21044; (301) 244-6590

Total assets managed	$10,600,000,000
Total discretionary assets	$8,857,000,000
Total tax-exempt assets	$7,121,000,000
Total discretionary tax-exempt	$6,793,000,000
Real estate equity assets	$493,000,000
Equity indexed assets	$570,000,000
Dedicated/immunized assets	$58,000,000
Mortgage-backed assets	$750,000,000
401(k)/457 plan assets	$35,000,000
Tax-exempt clients	162
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000

Security Trust Co. is an active and passive equity, active fixed-income, real estate, short-term and balanced manager.

The asset mix Jan. 1 was 31.6% stocks, 40.6% bonds, 12.8% cash, 5.9% equity real estate and 9.1% mortgage-backed securities.

The assets of ASB Capital Management Inc. are included above. ASB manages $6.703 billion in discretionary, institutional tax-exempt assets in active and passive equity, active and passive fixed-income, balanced, real estate and short-term accounts.

Its equity approach is oriented toward relative value; attractive securities are identified by a quantitative ranking of value and fundamental factors. Sector emphasis is made accordingly.

Its fixed-income approach combines interest rate anticipation, maturity and sector shifts, swaps and arbitrage and timely selection of issues.

For real estate, the firm invests in high-quality, income-producing properties constructed with union labor, through participating and convertible mortgages and joint ventures.

Terence W. Collins is chief investment officer and client contact.

Alan Seidner & Co.

P.O. Box 60510, Pasadena, Calif. 91116; (800) 445-0888

Total assets managed	$337,000,000
Total discretionary	$337,000,000
Total tax-exempt assets	$204,000,000
Total discretionary tax-exempt	$204,000,000
Tax-exempt clients	19
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	3

Alan Seidner & Co., an active bond and short-term manager, focuses its investment approach on a best relative value method. This is based on yield curve and yield spread analysis incorporating evaluation of sector and credit quality factors.

The asset mix Jan. 1 was 70% bonds and 30% cash.

Judith Warren is chief investment officer; Sandee Sheak is client contact.

Selected Financial Services

1331 Euclid Ave., Cleveland, Ohio 44115; (216) 696-3360

Total assets managed	$2,100,000,000
Total discretionary	$2,100,000,000
Total tax-exempt assets	$610,000,000
Total discretionary tax-exempt	$610,000,000
Dedicated/immunized assets	$50,000,000
Mortgage-backed assets	$100,000,000
401(k)/457 assets managed	$25,000,000
Tax-exempt clients	102
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	7

Selected Financial Services Inc. is an active equity, active fixed-income, balanced and no-load mutual fund manager. It also offers a small-cap equity management service.

Its equity approach is to combine risk averse, value-oriented stock selection of mainstream companies with a meaningful allocation to special niche growth situations. Strict share price discipline is observed. Its fixed-income portfolios, using sector analysis, are built to meet the optimum weight duration based on trend forecasts.

The asset mix Jan. 1 was 36% stocks, 40% bonds, 8% cash and 16% mortgage-backed securities.

The firm follows 25 stocks closely and 250, generally; 25% of the research is generated internally.

The parent is Kemper Financial Services Inc.

Raymond M. Druhot is chief investment officer; Christopher S. Cowlin is client contact.

J & W Seligman & Co. Inc.

130 Liberty St., New York, N.Y. 10006; (212) 488-0212

Total assets managed	$8,127,000,000
Total discretionary	$8,127,000,000
Total tax-exempt assets	$2,749,000,000
Total discretionary tax-exempt	$2,749,000,000
401(k)/457 assets managed	$37,000,000
Tax-exempt clients	123
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	20
Size of research staff	10

J & W Seligman & Co. Inc. is an active equity, active domestic and international/global bond and balanced manager.

Its primary equity approach focuses on growth and emerging growth stocks.

Its fixed-income approach follows an intermediate benchmark strategy based on management of key financial trade-offs (among issues and sectors) within a disciplined risk management framework. Maturity structure within benchmark parameters is based on long-term secular trends and client objectives. An equity-oriented high-yield bond approach is offered.

The asset mix Jan. 1 was 72% stocks, 20% bonds and 8% cash.

The firm follows 150 stocks closely and 300, generally; all research is generated internally.

Ronald T. Schroeder is chief investment officer; Michael J. Del Priore is client contact.

Sentinel Real Estate Corp.

1290 Avenue of the Americas, New York, N.Y. 10104; (212) 408-2900

Total assets managed	$2,118,000,000
Total discretionary	$1,798,000,000
Total tax-exempt assets	$1,653,000,000
Total discretionary tax-exempt	$1,333,000,000
Equity real estate assets	$1,266,000,000
Mortgage assets	$67,000,000
Tax-exempt clients	130
Types of accounts managed	CGJ
Minimum separate account	$20,000,000
No. of portfolio managers	5

Sentinel Real Estate Corp., a real estate manager, specializes in institutional-grade apartments that are internally managed.

The asset mix Jan. 1 was 95% equity real estate and 5% mortgages.

John H. Streicker is chief investment officer; John W. Kemble is client contact.

Shearson Asset Management

2 World Trade Center, 100th Floor, New York, N.Y. 10048; (212) 298-6800

Total assets managed	$5,855,000,000
Total discretionary	$5,855,000,000
Total tax-exempt assets	$2,530,000,000
Total discretionary tax-exempt	$2,530,000,000
401(k)/457 assets managed	$22,000,000
Tax-exempt clients	178
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	22

Shearson Asset Management is an active equity, active fixed-income and balanced manager.

Its equity approach uses fundamental analysis to assess earnings momentum, unrecognized value and the quality of management. Stocks should benefit from competitive advantage and dominant industry and economic trends. It focuses on well-capitalized companies with good relative value and price.

Its fixed-income approach is to invest in high-quality securities in issues or sectors undervalued on a relative basis.

The asset mix Jan. 1 was 43% stocks, 46% bonds, 11% cash.

The firm follows 120 stocks closely and 500, generally; 5% of research is generated internally.

The parent is Shearson Lehman Brothers/American Express.

Harry D. Cohen is chief investment officer; Amy E. Meyercord is client contact.

Shearson Equity Management

2 World Trade Center, 100th Floor, New York, N.Y. 10048; (212) 298-6196

Total assets managed	$718,000,000
Total tax-exempt assets	$280,000,000
Total discretionary tax-exempt	$280,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	1,400
Types of accounts managed	CF
Minimum separate account	$50,000
No. of portfolio managers	3
Size of research staff	1

Shearson Equity Management is an active equity and balanced manager.

Its equity approach is to invest in high-quality growth stocks. Its primary fixed-income approach for balanced accounts is passive.

The asset mix Jan. 1 was 67% stocks, 10% bonds, 3% cash.

The firm follows 100 stocks closely and 300, generally; 25% of research is generated internally.

The parent is Shearson Lehman Brothers/American Express.

Barry Berlin is chief investment officer; Jack Hochatrasser is client contact.

Shearson Lehman Advisors

2 World Trade Center, 100th Floor, New York, N.Y. 10048; (800) 848-7470

Total assets managed	$35,655,000,000
Total discretionary	$35,655,000,000
Total tax-exempt assets	$1,344,000,000
Total discretionary tax-exempt	$1,344,000,000
Dedicated/immunized assets	$200,000,000
Tax-exempt clients	378
Types of accounts managed	CEFG
Minimum separate account	$3,000,000
No. of portfolio managers	8
Size of research staff	3

Shearson Lehman Advisors is an active equity, active fixed-income, balanced and short-term manager.

Its value-oriented equity strategy has a strong fundamental bias. The firm employs a disciplined, risk-averse selection process.

Its fixed-income approach focuses on identifying underlying values and market inefficiencies. It relies heavily on ongoing credit and economic analysis as a basis for making modest shifts among sectors, quality grades and maturity profiles.

The asset mix Jan. 1 was 43% stocks, 47% bonds, 10% cash.

The firm follows 50 stocks closely and 640, generally; 30% of research is generated internally.

The parent is Shearson Lehman Brothers/American Express Co.

Frank V. Caruso is chief investment officer; Peter B. Frazier is client contact.

Sheffield Investment Management Inc.

900 Circle 75 Parkway Suite 750, Atlanta, Ga. 30339; (404) 953-1597

Total assets managed	$25,000,000
Total discretionary	$25,000,000
Total tax-exempt assets	$12,000,000
Total discretionary tax-exempt	$12,000,000
Tax-exempt clients	34
Types of accounts managed	C
Minimum separate account	$500,000
No. of portfolio managers	1

Sheffield Investment Management Inc. is an active equity and active fixed-income manager.

Its equity approach focuses on growth stocks and acquires issues which in the aggregate have the prospect for above-average growth of earnings and dividends.

Its fixed-income approach is based on intermediate term-ladder maturities. It focuses on one- to 10-year maturities of investment quality issues, typically non-callable corporates. They are generally held to maturity. There is no interest rate anticipation and the firm will sell any issues that fall below investment grade.

It uses options.

The asset mix Jan. 1 was 57% stocks and 43% fixed income.

The firm follows 100 stocks generally.

Roger A. Sheffield is chief investment officer and client contact.

Shields Asset Management

709 Westchester Ave., White Plains, N.Y. 10604; (914) 684-6900

Total assets managed	$4,564,000,000
Total discretionary	$4,564,000,000
Total tax-exempt assets	$4,564,000,000
Total discretionary tax-exempt	$4,564,000,000
Dedicated/immunized assets	$200,000,000
Mortgage-backed assets	$330,000,000
Tax-exempt clients	122
Types of accounts managed	CFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	7

Shields Asset Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is based on sector rotation. The firm attempts to identify and overweight sectors and industry groups most likely to benefit from anticipated political, fundamental and economic trends.

In fixed-income, maturity/duration judgments within an intermediate term average life are based on anticipating interest rate trends.

The asset mix Jan. 1 was 28% stocks, 53% bonds, 12% cash and 7% mortgage backed securities.

The firm follows 150 stocks closely and 1,000, generally; 60% of the research is generated internally.

The parent is Xerox Financial Services.

Kenneth Safian is chief investment officer; John R. Larkin is client contact.

Shinnecock Partners

477 Madison Ave., Suite 700, New York, N.Y. 10022; (212) 935-1733

Total:	
Assigned to other firms	$25,000,000
Tax-exempt	
Assigned to other firms	$5,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$1,000,000

Shinnecock Partners, a manager of managers, offers active domestic and international equity and fixed-income and balanced management through external managers.

Its equity and fixed-income approaches seek diversification using several strategies within portfolios.

George F. Amrhein is chief investment officer and client contact.

Siebel Capital Management

80 E. Sir Francis Drake Blvd., Larkspur, Calif. 94939; (415) 461-3850

Total assets managed	$625,000,000
Total discretionary	$625,000,000
Total tax-exempt assets	$495,000,000
Total discretionary tax-exempt	$495,000,000
Mortgage-backed assets	$6,000,000
Tax-exempt clients	130
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	5

Siebel Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, using low p/e growth stocks and sector rotation with market timing/tactical asset allocation.

Its fixed-income approach is duration management, using moderate market timing to follow the market.

The asset mix Jan. 1 was 60% stocks, 30% bonds, 9% cash and 1% mortgage-backed securities.

The firm follows 50 stocks closely and 100, generally.

Kenneth F. Siebel is chief investment officer; Lawrence A. Mitchell is client contact.

Signet Asset Management

7 N. Eighth St., Richmond, Va. 23260; (804) 771-7899

Total assets managed	$866,000,000
Total discretionary	$866,000,000
Total tax-exempt assets	$706,000,000
Total discretionary tax-exempt	$706,000,000
Tax-exempt clients	81
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Signet Asset Management is an active equity, active fixed-income, GIC pooled fund and balanced manager.

Its equity approach is value-oriented and risk averse, blending top-down economic analysis/sector weightings with a bottom-up approach to stock selection.

Its fixed-income approach uses interest rate anticipation, sector analysis and alternative securities. The firm emphasizes income and controlling interest rate/credit risk.

The asset mix Jan. 1 was 39.7% stocks, 45.5% bonds, 14.8% cash.

W. Guy Williams Jr. is chief investment officer; Scott R. Ayres is client contact.

Simpson Capital Management Co.

1205 PSFS Bldg., Philadelphia, Pa., 19107; (215) 629-0162

Total assets managed	$55,000,000
Total discretionary	$45,000,000
Total tax-exempt assets	$12,000,000
Total discretionary tax-exempt	$12,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	1

Simpson Capital Management Co. is an active equity, active fixed-income and balanced manager.

Its equity approach is contrarian, using Graham & Dodd analysis and low p/e screens to identify growth and emerging growth stocks. Sector rotation and market timing are used.

Its fixed-income approach predominantly uses Treasuries, controlling maturity management through interest rate anticipation.

The asset mix Jan. 1 was 50% stocks, 30% bonds and 20% cash.

The firm follows 200 stocks closely and 500, generally; 70% of the research is generated internally.

Allen J. Simpson is chief investment officer and client contact.

Sirach Capital Management

3323 One Union Square, Seattle, Wash. 98101; (206) 624-3800

Total assets managed	$1,500,000,000
Total discretionary	$1,500,000,000
Total tax-exempt assets	$1,400,000,000
Total discretionary tax-exempt	$1,400,000,000
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	11

Sirach Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach looks for earnings acceleration and relative price strength to identify when a good growth company becomes a good investment.

Its fixed-income approach uses interest-rate anticipation.

The asset mix Jan. 1 was 35% stocks, 45% bond and 20% cash.

The parent is United Asset Management Inc..

George B. Kauffman is chief investment officer; Thomas J. Gillespie is client contact.

Sit Investment Associates

4600 Norwest Center, 90 S. 7th St., Minneapolis, Minn. 55402-4130; (612) 332-3223

Total assets managed	$2,709,000,000
Total discretionary	$2,709,000,000
Total tax-exempt assets	$2,196,000,000
Total discretionary tax-exempt	$2,196,000,000
International equity assets	$155,000,000
Mortgage-backed assets	$26,000,000
Tax-exempt clients	28
Types of accounts managed	CEFG
Minimum separate account	$15,000,000
No. of portfolio managers	5
Size of research staff	5

Sit Investment Associates Inc. is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Its equity approach is rotational, used in combination with 10% to 15% positions in smaller and mid-size growth companies. Separate emerging growth style products are available. Its fixed-income approach uses interest rate anticipation rotated with short- and long-duration, stable return products. Fixed-income futures are used.

Eugene C. Sit is chief investment officer; Peter L. Mitchelson is client contact.

Sit/Kim International Investment Associates Inc.

4600 Norwest Center, 90 S. Seventh St., Minneapolis, Minn. 55402; (612) 332-3223

Total assets managed	$104,000,000
Total discretionary	$104,000,000
Total tax-exempt assets	$87,000,000
Total discretionary tax-exempt	$87,000,000
International equity assets	$78,000,000
International cash assets	$9,000,000
Tax-exempt clients	6
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	4

Sit/Kim International Investment Associates Inc. is an active international/global equity, regional equity and private investments manager.

Its equity approach focuses on the Pacific Basin, emphasizing growth both in country selection and in cross-border investment themes.

The asset mix Jan. 1 was 90% stocks and 10% cash.

The firm follows 200 stocks closely and 300, generally; 25% of the research is generated internally.

The parent is Sit Investment Associates Inc.

Andrew B. Kim is chief investment officer; Charlee R. Roberts is client contact.

Smith Affiliated Capital

880 Third Ave., New York, N.Y., 11743; (212) 644-9440

Total assets managed	$712,000,000
Total discretionary	$712,000,000
Total tax-exempt assets	$457,000,000
Total discretionary tax-exempt	$457,000,000
401(k)/457 assets managed	$30,000,000
Tax-exempt clients	41
Types of accounts managed	CEFGJ
Minimum separate account	$2,500,000

Smith Affiliated Capital is an active and passive fixed-income, balanced, active international/global fixed-income, short-term and municipal bond manager.

Its balanced approach has a heavy fixed-income bias (70%) and uses stocks as a hedge. Its active duration fixed-income approach starts with a secular view and moderates the cyclical interest rate risk with a yield curve discipline. The firm avoids credit risk and will accept maturity risk if it is rewarded with current return. Value is added through maturity and sector selection.

The asset mix Jan. 1 was 100% bonds.

Robert G. Smith Jr. is the client contact.

Cabanne Smith Associates

10[illegible]yn Mawr Ave., Suite 362, Bryn [illegible]r, Pa. 19010; (215) 525-8350

Tot[illegible] assets managed	$55,000,000
Tot[illegible] discretionary	$55,000,000
Total tax-exempt assets	$39,000,000
Total discretionary tax-exempt	$39,000,000
Tax-exempt clients	3
Types of accounts managed	CJ
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	2

Cabanne Smith Associates Inc. is an active equity manager that invests in growth equities where the two-year EPS growth rate is at least 1.25 times current market multiple, allowing the firm to construct portfolios for both conservative and aggressive investors.

Carole J. Smith is client contact.

Donald Smith & Co. Inc.

15 Essex Road, Paramus, N.J. 07652; (201) 368-9210

Total assets managed	$813,000,000
Total discretionary	$813,000,000
Total tax-exempt assets	$813,000,000
Total discretionary tax-exempt	$813,000,000
401(k)/457 assets managed	$33,000,000
Types of accounts managed	CEG
Minimum separate account	$50,000,000
No. of portfolio managers	2
Size of research staff	1

Donald Smith & Co. Inc., an active equity manager, focuses fundamental research on stocks with low p/e and low price/book value ratios.

The asset mix Jan. 1 was 57.1% stocks, 2.2% bonds, 40.7% cash.

The firm follows 200 stocks closely and 500, generally; 90% of research is generated internally.

Donald G. Smith is chief investment officer and client contact.

Smith Barney Capital Management

1345 Avenue of the Americas, New York, NY 10105; (212) 698-6131

Total assets managed	$4,616,000,000
Total discretionary	$4,616,000,000
Total tax-exempt assets	$3,000,000,000
Total discretionary tax-exempt	$3,000,000,000
International fixed-income	$235,000,000
Tax-exempt clients	131
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No.of portfolio managers	12
Size of research staff	72

Smith Barney Capital Management is an active equity, active domestic and international/global fixed-income and balanced manager.

Its equity approach is characterized by yield, moderate growth and low volatility, with an emphasis on high quality, higher-yielding stocks and convertibles.

Its fixed-income approach is index enhanced, primarily aimed at exploiting inefficiencies in the market across all sectors.

The asset mix Jan. 1 was 58% stocks and 42% bonds.

The parent is Smith Barney, Harris Upham & Co., Inc.

Bruce D. Sargent is chief investment officer; Jill B. Jordon is client contact.

Smith Breeden Associates

500 N. Akard, Suite 2575, Dallas, Texas 75201; (214) 871-2575

Total assets managed	$8,864,000,000
Total discretionary	$297,000,000
Total tax-exempt assets	$75,000,000
Total discretionary tax-exempt	$75,000,000
Mortgage-backed assets	$75,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$20,000,000
No. of portfolio managers	11
Size of research staff	13

Smith Breeden Associates Inc. is an active mortgage-backed security manager.

Its fixed-income approach is to outperform the market index or duration benchmark without incremental duration risk. Relative value selection is based on proprietary option-adjusted spread technology. Options and fixed-income futures are used.

All assets were in mortgage-backed securities Jan. 1.

All research is generated internally.

Douglas T. Breeden is chief investment officer; Stephen A. Eason is client contact.

Smith, Graham and Co. Asset Managers

3 Allen Center, 333 Clay St., Suite 4470, Houston, Texas 77002; (713) 739-1113

Total assets manag[illegible]	$30,000,000
Total discretionary	$30,000,000
Total tax-exempt assets	$30,000,000
Total discretionary tax-exempt	$30,000,000
Mortgage-backed assets	$10,000,000
Tax-exempt clients	2
Types of accounts managed	G
Minimum separate account	$15,000,000
No. of portfolio managers	2
Size of research staff	1

Smith, Graham and Co. Asset Managers is an active fixed-income manager.

Its approach is highly disciplined, based on sector weightings and strict duration control. Quantitative methods are used to evaluate and monitor the risk/reward relationship of individual securities and the overall portfolio.

The asset mix Jan. 1 was 59% bonds, 9% cash and 32% mortgage-backed securities.

The parent is Smith, Graham and Co. Inc.

Ladell Graham is chief investment officer; Gerald B. Smith is client contact.

Smith-Hines Investment Management

5800 Evergreen, Little Rock, Ark. 72205; (501) 664-8515

Total assets managed	$100,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	3

Smith-Hines Investment Management is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is managing short and hedged portfolios of growth and emerging growth stocks. Its fixed-income approach uses maturities of up to 12 years. Portfolios are not actively traded, but bonds are swapped to take advantage of attractive opportunities.

The asset mix Jan. 1 was 45% stocks and 55% bonds.

The firm follows 50 stocks closely and 100, generally; 35% of the research is generated internally.

William R. Smith is chief investment officer and client contact.

Smoot, Miller, Cheney & Co.

10 W. First South, Suite 312, Salt Lake City, Utah 84101; (801) 328-4835

Total assets managed	$1,136,000,000
Total discretionary	$1,136,000,000
Total tax-exempt assets	$1,110,000,000
Total discretionary tax-exempt	$1,110,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	65
Types of accounts managed	CFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Smoot, Miller, Cheney & Co. is an active equity, active-fixed income, balanced and short term manager.

Its equity approach is value-oriented, emphasizing companies with strong financial characteristics and superior market penetration. The research process is dynamic, focusing on relative value and earnings momentum. Fundamental and technical analysis are blended to optimize the timing of purchases and sales.

The fixed-income approach is based on interest rate anticipation and emphasizes intermediate-term maturities with a rating of A or higher.

The asset mix Jan. 1 was 67% stocks, 22% bonds and 11% cash.

The firm follows 125 stocks closely and 250 generally; 80% of the research is generated internally.

Robert H. Cheney is chief investment officer; Lynn C. Miller is client contact.

Snyder Capital Management

400 Montgomery St., Suite 700, San Francisco, Calif. 94104; (415) 392-3900

Total assets managed	$100,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$60,000,000
Total discretionary tax-exempt	$60,000,000
International equity assets	$5,000,000
Tax-exempt clients	15
Types of accounts managed	CEFJ
Minimum separate account	$2,000,000
No.of portfolio managers	1
Size of research staff	3

Snyder Capital Management Inc. is an active domestic and international/global equity, active and passive fixed-income and balanced manager.

Its equity approach seeks growth and emerging growth stocks. The firm is also a value manager and uses Graham & Dodd analysis.

Its primary fixed-income approach is passive.

The asset mix Jan. 1 was 70% stocks, 10% bonds 20% cash.

The firm follows 75 stocks closely and 150 generally; 70% of the research is generated internally.

Alan B. Snyder is chief investment officer; he and Walter Niemasik Jr. are client contacts.

Society Corp.

800 Superior, Cleveland, Ohio 44114; (216) 689-5474

Total assets managed	$8,090,000,000
Total discretionary	$8,090,000,000
Total tax-exempt assets	$2,566,000,000
Total discretionary tax-exempt	$2,566,000,000
401(k)/457 assets managed	$507,000,000
Tax-exempt clients	1,285
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	44
Size of research staff	4

Society Corp. is an active and passive equity, active fixed-income, balanced, short-term and GIC manager.

Its equity approach identifies undervalued issues through use of its relative value stock selection process based on the combined disciplines of value and earnings momentum.

Its fixed-income approach emphasizes high-quality securities to limit risk and ensure marketability. It pursues an active management approach to enhance portfolio returns by using swaps between maturities and market sectors.

Donald Cruse Jr. is chief investment officer; Timothy J. Connors is client contact.

The assets of the following subsidiaries are included in the figures above.

Society Bank & Trust $242 million in U.S. institutional discretionary tax-exempt assets. John M. Ryan is the chief investment officer; Robert Morrison is client contact.

Society Bank, Indiana manages $68 million in discretionary tax-exempt assets. James L. Lothary is chief investment officer; John H. Gordon is client contact.

Society Bank, Michigan manages $103 million in discretionary tax-exempt assets. Bernard A. Bedell is the chief investment officer; Richard Meyerson is client contact.

Society National Bank manages $1.786 billion in discretionary tax-exempt assets. Denis J. Amato is the chief investment officer; Mr. Connors is client contact.

Society Bank N.A. manages $385 million in discretionary tax-exempt assets. Richard Rolfes is chief investment officer and client contact.

Society Bank N.A.

34 N. Main St., Dayton, Ohio 45402; (513) 226-6090

See entry for SOCIETY CORP.

Society Bank, Indiana

202 S. Michigan St., South Bend, Ind. 46601; (219) 237-5301

See entry for SOCIETY CORP.

Society Bank, Michigan

100 S. Main St., Ann Arbor, Mich. 41807; (313) 994-5555

See entry for SOCIETY CORP.

Society Bank & Trust

P.O. Box 10099, Toledo, Ohio 43699-0099; (419) 259-8370

See entry for SOCIETY CORP.

Society National Bank

800 Superior Ave., Cleveland, Ohio 44114; (216) 689-5338

See entry for SOCIETY CORP.

Solon Asset Management

237 Park Ave., Suite 2100, New York, N.Y. 10017; (212) 551-1716

Total assets managed	$251,000,000
Total discretionary	$42,000,000
Total tax-exempt assets	$27,000,000
Total discretionary tax-exempt	$27,000,000
Mortgage-backed assets	$15,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	1

Solon Asset Management Corp. is an active fixed-income manager.

Portfolios are characterized by extremely high credit quality and tend to be duration neutral with respect to designated benchmarks. Value is added through sector allocation, product selection and yield curve analysis. It uses options.

The asset mix Jan. 1 was 38% bonds and 62% mortgage-backed securities.

James I. Midanek is chief investment officer; Deborah Hicks Midanek is client contact.

Sound Shore Management

8 Sound Shore Drive, P.O. Box 1810, Greenwich, Conn. 06836; (203) 629-1960

Total assets managed	$614,000,000
Total discretionary	$614,000,000
Total tax-exempt assets	$519,000,000
Total discretionary tax-exempt	$519,000,000
Tax-exempt clients	24
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	1

Sound Shore Management Inc., an active equity and balanced manager, combines computer valuation screens and fundamental research to select high-quality, out-of-favor stocks selling at low p/es, both absolutely and relative to their historic norms vs. the market.

The asset mix Jan. 1 was 56.6% stocks, 21% bonds and 22.4% cash.

Harry Burn III is chief investment officer; T. Gibbs Kane Jr. is client contact.

Southeast Bank

1 Southeast Financial Center, Miami, Fla. 33131; (305) 375-6793

Total assets managed	$3,132,000,000
Total discretionary assets	$2,532,000,000
Total tax-exempt assets	$410,000,000
Total discretionary tax-exempt	$370,000,000
401(k)/457 plan assets	$75,000,000
Tax-exempt clients	150
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	14
Size of research staff	2

Southeast Bank is an active equity and fixed-income and short-term manager.

Its "momentum matrix" equity strategy is bottom up, and considers earnings momentum, price momentum and suitability. In fixed income, its emphasis is on high-quality issues with maximum maturities of 10 years or less.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

The bank follows 200 stocks closely and 800, generally; 25% of research is generated internally.

The parent is Southeast Banking Corp.

David R. Kenney is chief investment officer; Al Goss is client contact.

Southeastern Asset Management

860 Ridgelake Blvd., Memphis, Tenn. 38119; (901) 761-2474

Total assets managed	$2,056,000,000
Total discretionary	$1,990,000,000
Total tax-exempt assets	$1,564,000,000
Total discretionary tax-exempt	$1,546,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	128
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	2

Southeastern Asset Management is an active equity, small-cap and balanced manager.

Its equity approach is value-oriented, using low p/e stocks and Graham & Dodd analysis. It chooses stocks whose prices are significantly below their intrinsic worth as determined by liquidating value, cash generating ability and comparable sales price.

The asset mix Jan. 1 was 90% stocks, 5% bonds and 5% cash.

The firm follows 300 stocks closely; 100% of the research is generated internally.

O. Mason Hawkins is chief investment officer; Frank N. Stanley is client contact.

Southport Financial Corp.

2507 Post Road, Southport, Conn. 06490; (203) 255-3434

Total assets managed	$500,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$100,000,000
Total discretionary tax-exempt	$100,000,000
Equity real estate assets	$100,000,000
Tax-exempt clients	5
Types of accounts managed	C
No.of portfolio managers	7

Southport Financial Corp., a real estate manager, follows a performance-oriented, value-added approach that takes advantage of inefficiencies and imperfections in the U.S. real estate market.

The asset mix Jan. 1 was 100% real estate.

C. Wheaton Vaughan is chief investment officer and client contact.

Sovran Bank N.A.

12th & Main Street, Richmond, Va. 26903; (804) 788-2388

See entry for C&S/SOVRAN TRUST CO.

Sovran Bank/Maryland

6610 Rockledge Drive, Bethesda, Md. 20817; (301) 493-2934

See entry for C&S/SOVRAN TRUST CO.

Sovran Bank/Tennessee

Sovran Plaza, Nashville, Tenn. 37219; (615) 749-3375

See entry for C&S/SOVRAN TRUST CO.

Sovran Capital Management

12th & Main Street, Richmond, Va. 23219; (804) 788-3805

Total assets managed	$2,950,000,000
Total discretionary	$2,950,000,000
Total tax-exempt assets	$2,950,000,000
Total discretionary tax-exempt	$2,950,000,000
Mortgage-backed assets	$590,000,000
401(k)/457 assets managed	$120,000,000
Tax-exempt clients	87
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	7

Sovran Capital Management is an active equity, active fixed-income, short-term and balanced manager.

Its equity approach focuses on low p/e, higher-yield stocks within fully invested, well-diversified portfolios. Its fixed-income approach uses three strategies: active sector rotation, moderate maturity changes and yield curve analysis.

The asset mix Jan. 1 was 20% stocks, 50% bonds, 10% cash, 20% mortgage-backed securities.

The firm follows 60 stocks closely and 800, generally; 50% of research is generated internally.

The parent is C&S/Sovran Corp.

Stuart Sachs is chief investment officer; Donald A. Steinbrugge and Tom MacGillivray are client contacts.

Spare, Tengler, Kaplan & Bischel

44 Montgomery St., Suite 3500, San Francisco, Calif. 94104; (415) 989-7852

Total assets managed	$394,000,000
Total discretionary	$381,000,000
Total tax-exempt assets	$332,000,000
Total discretionary tax-exempt	$319,000,000
401(k)/457 assets managed	$42,000,000
Tax-exempt clients	23
Types of accounts managed	CFG
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	4

Spare, Tengler, Kaplan & Bischel is an active equity and balanced manager.

Its equity approach focuses on value and relative dividend yield, investing solely in high-quality common stocks that provide high current income and low volatility relative to the market.

Its fixed-income approach is based in interest rate anticipation. It seeks dependable current income through investment in high-quality fixed-income securities (A rated or better corporates and governments and guaranteed agency issues).

The asset mix Jan. 1 was 80% stocks, 5% bonds and 15% cash.

The firm follows 100 stocks closely and 7,200 generally; 40% of the research is generated inter-

nally.

Anthony E. Spare and Nancy Tengler are chief investment officers; Sheila Ward and Susan Grivas are client contacts.

Spears Benzak Salomon & Farrell

45 Rockefeller Plaza, New York, N.Y. 10111; (212) 903-1200

Total assets managed	$1,800,000,000
Total discretionary	$1,800,000,000
Total tax-exempt assets	$906,000,000
Total discretionary tax-exempt	$906,000,000
Tax-exempt clients	32
Types of accounts managed	CEF
Minimum separate account	$20,000,000
No. of portfolio managers	4
Size of research staff	7

Spears Benzak Salomon & Farrell is an active equity, real estate, balanced, short-term and venture capital manager.

Its investment approach is opportunistic, concentrating on long-term total return. Stock selection is value-oriented and based on fundamental analysis. Preservation of principal is a key consideration. The investment time horizon is two to three years.

The asset mix Jan. 1 was 64.7% stocks, 12.6% bonds, 22.1% cash and 0.6% special investments.

The firm follows 300 stocks closely and 600, generally; 40% to 50% of research is generated internally.

William G. Spears is chief investment officer; Vincent Farrell Jr. is client contact.

Spectrum Asset Management Inc.

369 San Miguel Drive, Suite 300, Newport Beach, Calif. 92660; (714) 955-1121

Total assets managed	$75,000,000
Total discretionary	$75,000,000
Total tax-exempt assets	$45,000,000
Total discretionary tax-exempt	$45,000,000
401(k)/457 assets managed	$4,000,000
Tax-exempt clients	30
Types of accounts managed	CEF
Minimum separate account	$500,000
No.of portfolio managers	3
Size of research staff	1

Spectrum Asset Management Inc. is an active equity, fixed income, balanced and short-term management.

Its equity approach is risk-averse, using active asset allocation and seeking genuine values. Selection is bottom up, with consideration to insider accumulation and technical support.

Its fixed-income approach adjusts maturity structure over a credit cycle. It uses only U.S. government issues with public utility equities used as surrogates to provide a rising yield floor.

The asset mix Jan. 1 was 35% stocks, 35% bonds and 30% cash.

The firm follows 60 stocks closely and 100, generally; 80% of research is generated internally.

R. Kelly Kelly is chief investment officer; Marc Kelly is client contact.

George B. Springman Inc.

44 Montgomery St., Suite 626, San Francisco, Calif. 94104; (415) 326-5005

Total assets managed	$132,000,000
Total discretionary	$132,000,000
Total tax-exempt assets	$132,000,000
Total discretionary tax-exempt	$132,000,000
Tax-exempt clients	3
Types of accounts managed	G
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	1

George B. Springman Inc., an active equity manager, stresses a bottom-up methodology, emphasizing reasonably valued, large-cap growth issues. Selected turnaround investments are used. The risk profile of portfolios is moderately conservative.

The asset mix Jan. 1 was 91.1% stocks and 8.9% cash.

George B. Springman is chief investment officer and client contact.

SSI (Statistical Sciences Inc.)

356 N. Camden Drive, Beverly Hills, Calif. 90210; (213) 275-5551

Total assets managed	$290,000,000
Total discretionary	$290,000,000
Total tax-exempt assets	$270,000,000
Total discretionary tax-exempt	$270,000,000
Tax-exempt clients	60
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	3

SSI (Statistical Sciences Inc.) is an active, long/short equity and balanced manager.

Its equity approach uses long and short stock positions simultaneously in a dollar and sector neutral approach. It stresses extremely low volatility and consistent returns.

Its fixed-income approach extends maturities when interest rates are expected to fall.

The asset mix Jan. 1 was 50% stocks, 15% bonds, 5% cash and 30% long/short equity.

The firm follows 100 stocks closely and 1,800, generally; all research is generated internally.

John D. Gotffurcht is chief investment officer; Bradford J. Ebner is client contact.

Standard Life Assurance Co.

1245 Sherbrooke St. W., Montreal, Quebec H3G 1G3; (514) 284-6711

Total assets managed	$1,929,000,000
Total discretionary	$364,000,000
Total tax-exempt	$364,000,000
Total discretionary tax-exempt	$364,000,000
For subsidiaries of U.S. firms	$66,000,000
Equity real estate assets	$15,000,000
Mortgage assets	$36,000,000
Tax-exempt clients	112
U.S. subsidiaries	27
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	11
Size of research staff	8

Standard Life Assurance Co., a Canadian firm, is an active equity, active fixed-income, balanced, real estate, short-term and mortgage manager.

Its equity approach is quantitative, uses market timing/tactical asset analysis and seeks low p/e. The firm's fully invested basis core is large-cap stocks and stocks in industries of secular growth. Quality and liquidity are emphasized.

Its fixed-income approach centers on interest rate anticipation and active trading to exploit aberrations in valuation of individual issues or market sectors. The core is mid-term bonds (five to 10 years) along with cash and long-term bonds.

Its real estate approach focuses on properties diversified by type and location providing income, protection against inflation and portfolio risk reduction in a balanced portfolio.

The asset mix Jan. 1 was 29% Canadian stocks, 9% U.S. stocks, 40% bonds, 8% cash, 4% equity real estate and 10% mortgages.

It follows 100 stocks closely and 180, generally; 70% of research is generated internally.

The parent is Standard Life Assurance Co., Edinburgh, Scotland.

Peter C. Hill is chief investment officer; Bonnie Auger is client contact.

Standish, Ayer & Wood Inc.

1 Financial Center, Boston, Mass. 02111; (617) 350-6100

Total assets managed	$11,394,000,000
Total discretionary	$11,384,000,000
Total tax-exempt assets	$5,867,000,000
Total discretionary tax-exempt	$5,867,000,000
International equity assets	$49,000,000
International fixed-income	$200,000,000
Mortgage-backed assets	$2,156,000,000
Tax-exempt clients	154
Types of accounts managed	CEFGJ
Minimum separate account	$1,500,000
No. of portfolio managers	22
Size of research staff	7

Standish, Ayer & Wood Inc. is an active domestic and international/global equity and fixed-income, balanced, short-term and securitized manager.

Its equity approach focuses on the search for undervalued business momentum and places maximum emphasis on security selection. It applies judgment to the subset of stocks identified by its model.

Its fixed-income approach uses intermediate maturities, sector analysis and non-Treasury/inefficient/innovative securities, and credit analysis.

Options and financial futures are used.

The asset mix Jan. 1 was 7% stocks, 55% bonds, 1% cash and 37% mortgage-backed securities.

The firm follows 100 stocks closely and 400, generally; 80% of research is generated internally.

Edward H. Ladd is chief investment officer; Karen K. Chandor is client contact.

Star Bank N.A., Eastern Indiana

Promenade at Eighth, Richmond, Ind. 47374; (317) 983-2209

Total assets managed	$310,000,000
Total discretionary assets	$240,000,000
Total tax-exempt assets	$70,000,000
Total discretionary tax-exempt	$70,000,000
International equity assets	$1,000,000
Equity indexed assets	$2,000,000
401(k)/457 plan assets	$20,000,000
Tax-exempt clients	200
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	1

Star Bank N.A., Eastern Indiana is an active and passive equity, active and passive fixed-income, balanced, short-term and tactical asset allocation manager.

Its equity approach uses sector rotation, quantitative techniques, low p/e stocks and TAA. Its fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 35% stocks, 55% bonds and 10% cash.

The bank follows 200 stocks closely and 3,000, generally; all research is generated internally.

The parent is Star Bank Corp.

Kim R. Kemper is chief investment officer and client contact.

Starbuck, Tisdale & Associates

301 E. Carrillo, Santa Barbara, Calif. 93117; (806) 963-5963

Total assets managed	$158,000,000
Total discretionary	$153,000,000
Total tax-exempt assets	$82,000,000
Total discretionary tax-exempt	$82,000,000
401(k)/457 assets managed	$500,000
Tax-exempt clients	56
Types of accounts managed	CEFG
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

Starbuck, Tisdale & Associates is an active equity and balanced manager.

Its equity approach is value-oriented, using low p/e stocks and Graham and Dodd analysis.

The firm follows 40-60 stocks closely and 80-100, generally; 20% of the research is generated internally.

L. David Tisdale is chief investment officer; Patrick S. Steele is client contact.

State Mutual Cos.

440 Lincoln St., Worcester, Mass. 01605; (508) 855-1000

Total assets managed	$8,711,000,000
Total discretionary assets	$8,711,000,000
Total tax-exempt assets	$4,282,000,000
Total discretionary tax-exempt	$4,282,000,000
GICs	$4,067,000,000
Annuities	$75,000,000
Equity real estate assets	$105,000,000
Mortgage assets	$1,655,000,000
Equity indexed assets	$38,000,000
Tax-exempt clients	1,662
No. of portfolio managers	5
Size of research staff	17

State Mutual Cos. is an active and passive equity, active and passive fixed-income, and short-term manager.

Its active equity accounts are handled by Miller, Anderson & Sherrerd, which manages $152 million in tax-exempt assets (not included above) on the insurer's behalf.

In fixed income, it offers active and passive management and immunization/dedication.

The separate account asset mix Jan. 1 was 25% stock, 21% bonds and 54% cash.

James R. McAuliffe is chief investment officer; Rich McGirr is client contact.

State Street Bank and Trust

225 Franklin St., Boston, Mass. 02110; (617) 654-3953

Total assets managed	$63,726,000,000
Total discretionary assets	$51,127,000,000
Total tax-exempt assets	$45,007,000,000
Discretionary tax-exempt	$45,007,000,000
Real estate equity assets	$556,000,000
International equity assets	$8,431,000,000
International fixed-income	$257,000,000
Equity indexed assets	$19,998,000,000
Fixed-income indexed assets	$6,119,000,000
Dedicated/immunized assets	$853,000,000
Mortgage-backed assets	$505,000,000
401(k)/457 plan assets	$1,524,000,000
Tax-exempt clients	325
Types of accounts managed	CEFGJ
Minimum separate account	$25,000,000
No. of portfolio managers	41
Size of research staff	14

State Street Bank and Trust Co. offers active and passive strategies for domestic and international equity and fixed-income, as well as balanced, tactical asset allocation, real estate, short-term and futures management.

Its equity approach is quantitatively driven, offering passive strategies, tilted or enhanced indexing and risk-constrained active disciplines designed to provide incremental returns over selected domestic and international benchmarks.

Its primary fixed-income approach is passive, focusing on intelligent risk management for active, dedicated and indexed income portfolios. The firm specializes in using financial futures to alter portfolio asset allocation and risk profile.

Options are used.

Its real estate approach uses closed-end, commingled and broadly diversified portfolios. It invests in equity real estate on a fee basis, using active management.

The firm manages $1.824 billion in fully hedged, currency protection and currency selection overlay strategies, of which $824 million of the underlying assets is managed internally. The remaining $1 billion is overlay strategies is not reflected in the assets above.

The asset mix Jan. 1 was stocks 52.6%, bonds 11.5%, cash 29%, equity real estate 1.2%, mortgage-backed securities 1.1%, and 4.6% in balanced accounts and futures.

The bank follows 2,500 stocks closely and 3,000, generally; all research is generated internally.

The parent is State Street Boston Corp.

Nicholas A. Lopardo is chief investment officer; Peter E. Braun is client contact.

State Street Research & Management Co.

1 Financial Center, Boston, Mass. 02111; (617) 482-3920

Total assets managed	$15,144,000,000
Total discretionary	$15,144,000,000
Total tax-exempt assets	$12,179,000,000
Discretionary tax-exempt	$12,179,000,000
Dedicated/immunized assets	$1,602,000,000
Mortgage-backed assets	$1,750,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$25,000,000
No. of portfolio managers	21
Size of research staff	24

State Street Research & Management Co. is an active equity, active bond and balanced manager.

Its equity approach uses stock selection based on internally generated fundamental research buying individual securities based on the most attractive relationship between expected growth and value.

Its fixed-income approach focuses on shifting duration based on interest rate trends while taking advantage of individual issue and sector opportunities. Fixed-income futures are used.

The asset mix Jan. 1 was 46% stocks, 34% bonds, 7% cash and 14% mortgage-backed securities.

The firm follows 225 stocks closely and 550, generally; 95% of the research is generated internally.

The parent is Metropolitan Life Insurance Co.

John D. Phillips Jr. and Roger C. Stone are chief investment officers of equities and fixed income, respectively; Edward W. Bickford is client contact.

Steele & Co.

32 W. Hoster St., Suite 250, Columbus, Ohio 43215; (614) 461-5901

Total assets managed	$70,000,000
Total discretionary	$30,000,000
Total tax-exempt assets	$22,000,000
Total discretionary tax-exempt	$22,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	25
Types of accounts managed	C
Minimum separate account	$500,000
No. of portfolio managers	1

Steele & Co. is an active equity and fixed-income, balanced and tactical asset allocation manager.

Its equity approach uses growth and emerging growth stocks, sector rotation and market timing. Technical analysis is emphasized.

Its fixed-income approach uses interest rate anticipation and trend analysis based on technical analysis. Its fixed-income model allows swift market timing between long-term Treasuries and cash. Fixed-income futures are used.

The asset mix Jan. 1 was 50% stocks, 45% bonds and 5% cash.

The firm follows 35 stocks closely and 100, generally; 95% of the research is generated internally.

Michael B. Steele is chief investment officer and client contact.

Stein Roe & Farnham Inc.

1 S. Wacker Drive, Chicago, Ill., 60606; (312) 368-7700

Total assets managed	$20,808,000,000
Total discretionary	$19,433,000,000
Total tax-exempt assets	$5,520,000,000
Total discretionary tax-exempt	$5,422,000,000
International equity assets	$160,000,000
International fixed-income	$10,000,000
Fixed-income indexed assets	$25,000,000
Dedicated/immunized assets	$25,000,000
Mortgage-backed assets	$671,000,000
Tax-exempt clients	521
Types of accounts managed	CEFGJ
Minimum separate account	$600,000
No. of portfolio managers	52
Size of research staff	24

Stein Roe & Farnham Inc. is an active equity, active and passive fixed-income, balanced and active international/global equity and fixed-income manager.

For equities, the firm invests primarily in growth stocks seeking companies capable of producing steady, above-average earnings and dividend growth over many market cycles. Some portfolios may contain an opportunistic component with characteristics such as turnarounds or undervalued assets.

Its primary fixed-income approach is risk-averse and employs multiple disciplines (maturity optimization, sector rotation and credit selection) with a bias toward capital preservation in bear markets.

The asset mix Jan. 1 was 36% stocks, 47% bonds, 3% cash and 12% mortgage-backed securities.

The firm follows 425 stocks closely and 6,500, generally; 90% of research is generated internally.

The parent is Liberty Mutual Insurance Co.

Timothy A. Schlindwein and H. Kent Mergler are chief investment officers; Jonathan F. Zeechin is client contact.

Steiner Diamond Asset Management Inc.

140 S. Dearborn St., Suite 420, Chicago, Ill. 60603; (312) 630-8950

Total assets managed	$103,000,000
Total discretionary	$103,000,000
Total tax-exempt assets	$20,000,000
Total discretionary tax-exempt	$20,000,000
Tax-exempt clients	3
Types of accounts managed	CF
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Steiner Diamond Asset Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses sector rotation and Graham & Dodd analysis. The firm assumes the risks associated with an equity investment only when it anticipates a return that is at least double the risk-free returns.

Its fixed-income approach uses portfolios that are measured and optimized through 15 attributes.

The asset mix Jan. 1 was 60% stocks, 38% fixed-income and 2% cash.

The firm follows 60 stocks closely and 270, generally; 40% of research is generated internally.

Terry D. Diamond is chief investment officer; Alan R. Wilson is client contact.

Sterling Capital Management

1770 Independence Center, Charlotte, N.C. 28246; (704) 372-8670

Total assets managed	$632,000,000
Total discretionary	$632,000,000
Total tax-exempt assets	$440,000,000
Total discretionary tax-exempt	$440,000,000
401(k)/457 assets managed	$15,000,000
Tax-exempt clients	80
Types of accounts managed	CEFG
No. of portfolio managers	7

Sterling Capital Management is an active equity, active fixed-income, balanced and tactical asset allocation manager.

It uses an asset allocation discipline based on detailed analysis of business cycle indicators and comparison of expected returns among stocks, bonds and cash.

Equity selection is driven by a valuation model. Fixed-income investments are regarded as a source of liquidity, as vehicles for capital preservation and as a means to reduce overall volatility. Government and high-grade corporate bonds are used within an interest rate anticipation strategy.

The asset mix Jan. 1 was 49% stocks, 31% bonds and 20% cash.

The firm follows 200 stocks closely and 200, generally; 75% of the research is generated internally.

The parent is United Asset Management.

W. Olin Nisbet is chief investment officer; J. Calvin Rivers, E. Jack Whitman and Allyson R. Floyd are client contacts.

Strategic Commodity Systems

4835 Towne Centre Drive, Suite 205, Saginaw, Mich. 48604; (517) 791-1800

Total:	
Assigned to other firms	$40,000,000
Tax-exempt:	
Assigned to other firms	$40,000,000
Tax-exempt clients	2
Types of accounts managed	G
Minimum separate account	$5,000,000

Strategic Commodity Systems is a futures manager of managers that allocates assets to managers with different styles and risk/reward characteristics using a negative correlation method.

Glenn R. Crane is chief investment officer; James M. Stapleton is client contact.

Strategic Investment Partners Inc.

2000 K St. N.W., Suite 400, Washington, D.C. 20006; (202) 785-2300

Total:	
Assigned to other firms	$5,481,000,000
Tax-exempt:	
Assigned to other firms	$4,640,000,000
Minimum separate account	$20,000,000
No. of portfolio managers	6
Size of research staff	4

Strategic Investment Partners Inc. primarily is a manager of managers that offers active and passive domestic and international equity and fixed-income as well as real estate management.

Equity approaches include growth, emerging growth, market timing/tactical asset allocation, quantitative, low p/e and Graham & Dodd. The firm sets the duration of fixed-income portfolios.

Hilda Ochoa-Brillembourg is chief investment officer and client contact.

Strategic Property Advisers

225 Broadway, Suite 1210, San Diego, Calif. 92101; (619) 234-9632

Total assets managed	$34,000,000
Total discretionary	$34,000,000
Total tax-exempt assets	$34,000,000
Total discretionary tax-exempt	$34,000,000
Equity real estate assets	$34,000,000
Tax-exempt clients	4
Types of accounts managed	GJ
Minimum separate account	$3,000,000
No. of portfolio managers	2
Size of research staff	1

Strategic Property Advisers Inc. is an equity real estate manager that purchases unleveraged $3 million to $20 million apartment and low-rise offices in suburban growth corridors in selected high growth markets. For Taft-Hartley plans, it purchases only fully constructed and leased properties; subsequent operation and management uses only union contractors and service providers.

The asset mix Jan. 1 was 100% real estate equity.

Peter G. Aylward is chief investment officer; Joseph A. Manseillo is client contact.

Stratton Capital Management Inc.

4900 Main St., Suite 718, Kansas City, Mo. 64112; (816) 561-5670

Total assets managed	$20,000,000
Total discretionary	$20,000,000
Total tax-exempt assets	$13,000,000
Total discretionary tax-exempt	$13,000,000
401(k)/457 assets managed	$6,000,000
Tax-exempt clients	82
Types of accounts managed	CE
Minimum separate account	$50,000
No. of portfolio managers	2

Stratton Capital Management Inc., an active equity manager, uses technical analysis of individual issues to screen for stocks that appear to be under accumulation. Sell disciplines are emphasized. It uses interest rate anticipation to select short- to intermediate-term Treasuries.

The asset mix Jan. 1 was 85% stocks, 15% cash.

The firm follows 500 stocks closely and 1,500, generally; all research is generated internally.

John Stratton is chief investment officer; Brad Stratton is client contact.

Stratton Management Co.

610 West Germantown Pike, Suite 361, Plymouth Meeting, Pa. 19462; (215) 941-0888

Total assets managed	$518,000,000
Total discretionary	$518,000,000

Total tax-exempt assets	$259,000,000
Total discretionary tax-exempt	$289,000,000
401(k)/457 assets managed	$16,000,000
Tax-exempt clients	41
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	1

Stratton Management Co. is an active equity and balanced manager.

Its equity approach constructs portfolios generating above-average income from dividends plus a competitive total return. Yields generally exceed the S&P 500 by 50%. Its fixed-income approach is passive.

The asset mix Jan. 1 was 69% stocks, 24% bonds and 7% cash.

The firm follows 100 stocks closely and 350, generally; 25% of the research is generated internally.

James W. Stratton is chief investment officer; Charles H. Hopkins is client contact.

Strong/Corneliuson Capital Management Inc.

100 Heritage Reserve, P.O. Box 2936, Milwaukee, Wis. 53201; (414) 359-3400

Total assets managed	$4,039,000,000
Total discretionary	$4,039,000,000
Total tax-exempt assets	$1,461,000,000
Total discretionary tax-exempt	$1,461,000,000
International equity assets	$32,000,000
Dedicated/immunized assets	$6,000,000
Mortgage-backed assets	$61,000,000
401(k)/457 assets managed	$125,000,000
Tax-exempt clients	87
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	4

Strong/Corneliuson Capital Management Inc. is an active equity, active fixed-income, tactical asset allocation, short-term and balanced manager.

Its equity approach follows a flexible, value-oriented philosophy focused on selecting those securities whose prices are most likely to benefit from the economic cycle as they perceive it.

Its fixed-income approach is active, using a value approach to manage portfolio duration, yield curve exposures, sector exposures and to select individual securities. Financial futures are used.

The asset mix Jan. 1 was 34.7% stocks, 30.7% bonds, 28.9% cash and 5.7% mortgages.

The firm follows 250 stocks closely and 700, generally; 90% of research is generated internally.

Richard S. Strong is chief investment officer; Kevin Gaughan is client contact.

STW Fixed Income Management

P.O. Box 5019, Carpinteria, Calif. 93014-5019; (805) 566-9122

Total assets managed	$6,340,000,000
Total discretionary	$6,340,000,000
Total tax-exempt assets	$4,707,000,000
Total discretionary tax-exempt	$4,707,000,000
401(k)/457 assets managed	$76,000,000
Tax-exempt clients	76
Types of accounts managed	CEFG
Minimum separate account	$30,000,000
No. of portfolio managers	3

STW Fixed Income Management, an active fixed-income manager, seeks undervalued bonds considering quality, maturity, coupon and sector. Its long-duration product maximizes future income stream; short duration imposes minimum return constraints. Fixed-income futures are used.

The asset mix Jan. 1 was 100% bonds.

William H. Williams is chief investment officer; Mitchell S. Little is client contact.

Sullivan Money Management

616 FM 1960 West, Suite 200, Houston, Texas 77090; (713) 583-0911

Total assets managed	$81,000,000
Total discretionary	$81,000,000
Total tax-exempt assets	$77,000,000
Total discretionary tax-exempt	$77,000,000
Tax-exempt clients	2
Types of accounts managed	EG
Minimum separate account	$5,000,000
No. of portfolio managers	2

Sullivan Money Management Inc., an active bond manager, employs fundamental credit analysis combined with an equity-oriented forward-looking approach to identifying value and total return potential in corporate and high-yield bonds.

The asset mix Jan. 1 was 100% bonds.

James L. Sullivan is chief investment officer and client contact.

Sullivan, Morrissey & Mickle Capital Management Corp.

450 Park Ave., New York, N.Y. 10022; (212) 832-7440

Total assets managed	$75,000,000
Total discretionary	$75,000,000
Total tax-exempt assets	$60,000,000
Total discretionary tax-exempt	$60,000,000
Tax-exempt clients	13
Types of accounts managed	CJ
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	3

Sullivan, Morrissey & Mickle Capital Management Corp. is an active equity, active fixed-income and balanced manager.

The firm takes a value/growth-oriented approach. Its primary fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 70% stocks; 15% bonds; and 15% cash.

The firm follows 150 stocks closely and 500, generally; 95% of research is generated internally.

John F. Sullivan is chief investment officer and client contact.

Sumitrust Security Pacific Investment Managers Inc.

300 S. Grand Ave., HCP 223, Los Angeles, Calif. 90071; (213) 229-1580

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Summit Investment Management Ltd.

2323 N. Mayfair Road, Milwaukee, Wis. 53226; (414) 256-7433

Total assets managed	$61,000,000
Total discretionary	$61,000,000
Total tax-exempt assets	$38,000,000
Total discretionary tax-exempt	$38,000,000
Tax-exempt clients	49
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	2

Summit Investment Management Ltd. is an active equity, active fixed-income and balanced manager.

Its equity approach seeks undervalued stocks based on a real cash flow return on investment model that requires stocks have a minimum 20% upside potential in a stable market. Its intermediate maturity fixed-income style is based on interest rate anticipation using A or better rated bonds.

The asset mix Jan. 1 was 40% stocks, 45% bonds and 15% cash.

The firm follows 200 stocks closely and 3,000 generally; 65% of the research is generated internally.

Marvin R. Swentkofske is chief investment officer; Donald E. Stockhausen is client contact.

Summit Trust Co.

367 Springfield Ave., Summit, N.J. 07901; (908) 522-8428

Total assets managed	$1,132,000,000
Total discretionary assets	$1,077,000,000
Total tax-exempt assets	$183,000,000
Total discretionary tax-exempt	$183,000,000
401(k)/457 plan assets	$15,000,000
Tax-exempt clients	247
Types of accounts managed	CEFGJ
Minimum separate account	$300,000
No. of portfolio managers	6

Summit Trust Co. is an active equity, active fixed-income and balanced manager.

Its equity approach uses growth stocks and quantitative methods, creating low-turnover portfolios that capitalize on superior economic fundamentals. Its fixed-income approach uses interest rate anticipation and sector analysis, seeking to create portfolios of superior quality that modestly outperform the Shearson Lehman intermediate indsx.

The asset mix Jan. 1 was 21% stocks, 58% bonds, 21% cash.

The bank follows 105 stocks closely and 300 generally.

The parent is Summit Bancorp.

Hilton M. Jervey is chief investment officer and client contact.

SunBank Capital Management N.A.

200 S. Orange Ave., P.O. Box 3786, Orlando, Fla. 32802; (407) 237-4352

Total assets managed	$6,850,000,000
Total discretionary	$6,850,000,000
Total tax-exempt assets	$6,850,000,000
Total discretionary tax-exempt	$5,850,000,000
Tax-exempt clients	113
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	10
Size of research staff	3

SunBank Capital Management N.A. is an active equity, active fixed-income and balanced manager.

Its equity approach seeks superior returns by investing in stocks with above average historical expected growth and strong fundamentals that are selling at low relative prices. Its fixed-income approach emphasizes the full range of maturities and shifts holdings on the basis of interest rate anticipation, sector swapping and yield curve analysis.

The asset mix Jan. 1 was 92% stocks and 8% cash.

The firm follows 150 stocks closely and 300, generally; 20% of the research is generated internally.

The parent is SunTrust Banks Inc.

Anthony R. Gray is chief investment officer; Victor A. Zollo Jr. is client contact.

Sun Life of Canada Investment Management

200 University Ave., Toronto, Ontario M5H 3C7; (416) 595-7809

Total assets managed	$2,794,000,000
Total discretionary	$2,544,000,000
Total tax-exempt	$2,572,000,000
Total discretionary tax-exempt	$2,279,000,000
For subsidiaries of U.S. firms	$700,000,000
Equity real estate assets	$349,000,000
Mortgage assets	$218,000,000
Non-North American equities	$13,000,000
Equity indexed assets	$103,000,000
Dedicated/immunized assets	$38,000,000
Tax-exempt clients	190
U.S. subsidiaries	27
Types of accounts managed	CGJ
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	8

Sun Life of Canada Investment Management, a Canadian firm, is an active and passive equity, active fixed-income, real estate, active international equity, short-term, mortgage and balanced manager.

Its equity approach stresses undervalued situations using Graham & Dodd analysis. The firm concentrates on low p/e and strong financials.

In fixed-income portfolios, term is shifted significantly based on expected interest rate trends. Heavy emphasis is placed on AAA rated securities.

Its real estate approach is to invest in existing office, commercial and residential properties across Canada. Generally the firm purchases outright and manages all properties.

The asset mix Jan. 1 was 24.6% Canadian stocks, 4% U.S. stocks, 24.6% bonds, 20.6% cash, 15.3% equity real estate, 9.5% mortgages and 1.4% other.

It follows 100 stocks closely and 200, generally; 75% of research is generated internally.

The parent is Sun Life Assurance Co. of Canada.

Donald T. Walcot is chief investment officer; Hans van Monsjou is client contact.

Swanson Capital Management

101 N. Main St., Suite 800, Ann Arbor, Mich. 48104; (313) 996-8400

Total assets managed	$171,000,000
Total discretionary	$171,000,000
Total tax-exempt assets	$100,000,000
Total discretionary tax-exempt	$100,000,000
Tax-exempt clients	190
Types of accounts managed	CEF
Minimum separate account	$150,000
No. of portfolio managers	3

Swanson Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach uses sector rotation, market timing/tactical asset allocation and demonstrated growth, recognizing historical valuation standards for asset classes, supplemented by sector based growth and value selection.

Its fixed-income approach uses interest rate anticipation. Bonds are actively managed for target duration based on fiscal and monetary valuation modeling.

The asset mix Jan. 1 was 28% stocks, 40% bonds and 32% cash.

The firm follows 75 stocks closely and 250, generally; 95% of the research is generated internally.

Stephen A. Swanson is chief investment officer; Steven M. Appledorn is client contact.

K.S. Sweet Associates

259 Radnor-Chester Road, Box 6780, Radnor, Pa. 19087; (215) 964-0112

Total assets managed	$618,000,000
Total discretionary	$618,000,000
Total tax-exempt assets	$110,000,000
Total discretionary tax-exempt	$20,000,000
Tax-exempt clients	4
Types of accounts managed	CEG
Minimum separate account	$25,000,000
No. of portfolio managers	6

K.S. Sweet Associates is a a real estate and venture capital manager.

Its real estate approach is highly focused and opportunistic, taking advantage of cyclical trends.

The discretionary tax-exempt asset mix Jan. 1 was 100% venture capital.

Richard K. Layman is chief investment officer and client contact for real estate; J.B. Doherty is chief investment officer and client contact for venture capital.

Systematic Financial Management Inc.

2 Executive Drive, Fort Lee, N.J. 07024; (201) 585-9290

Total assets managed	$174,000,000
Total discretionary	$174,000,000
Total tax-exempt assets	$121,000,000
Total discretionary tax-exempt	$121,000,000
Tax-exempt clients	137
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	2

Systematic Financial Management Inc. is an active equity and balanced manager.

Its equity approach is quantitative and value-oriented. It builds broadly diversified portfolios of undervalued companies that have superior "free" cash flow characteristics. Its fixed-income approach uses credit analysis and cash flow analysis in a quantitative approach to add value to balanced accounts. Interest rate anticipation is used.

The asset mix Jan. 1 was 90% stocks and 10% cash.

The firm follows 8,000 stocks generally; all research is generated internally.

Kenneth S. Hackel is chief investment officer; Jason J. Wallach is client contact.

The *P&I*/InterSec 300, a list of the world's largest pension funds, will be published in the Aug. 5 issue of *Pensions & Investments*.

Taplin, Canida & Habacht

1001 S. Bayshore Drive, Suite 2100, Miami, Fla. 33131; (305) 379-2100

Total assets managed	$225,000,000
Total discretionary	$225,000,000
Total tax-exempt assets	$150,000,000
Total discretionary tax-exempt	$150,000,000
Tax-exempt clients	19
Types of accounts managed	CFG
Minimum separate account	$10,000,000
No. of portfolio managers	3

Taplin, Canida & Habacht is an active equity and fixed-income and balanced manager.

Its equity approach blends quantitative tools and qualitative research. Using strict criteria, the firm seeks companies undervalued on an asset or earnings valuation basis. Its fixed-income approach focuses on high-quality issues with maturities ranging from an average of five to 12 years. Interest rate anticipation and sector analysis are used.

The asset mix Jan. 1 was 77% equities, 21% fixed income and 2% cash.

The firm follows 100 stocks closely and 500, generally; 75% of the research is generated internally.

Alan M. Habacht is chief investment officer; Tere Alvarez Canida is client contact.

Target Investors Inc.

Wilton Executive Campus, 15 River Road, Wilton, Conn. 06897; (203) 761-9600

Total assets managed	$150,000,000
Total discretionary	$150,000,000
Total tax-exempt assets	$150,000,000
Total discretionary tax-exempt	$150,000,000
Tax-exempt clients	6
Types of accounts managed	CG
Minimum separate account	$5,000,000
No. of portfolio managers	2

Target Investors Inc., an active equity manager, invests in small growth companies having relatively low p/es, strong balance sheets and positive earnings surprise potential.

The asset mix Jan. 1 was 99% stocks and 1% cash.

The firm follows 100 stocks closely and 2,000, generally; 90% of research is generated internally.

Robert Zuccaro is chief investment officer; James C. Vogelzang is client contact at (303) 629-1900.

TCW Realty Advisors

400 S. Hope St., Suite 600, Los Angeles, Calif. 90071-2899; (213) 683-4200

Total assets managed	$3,742,000,000
Total discretionary	$3,742,000,000
Total tax-exempt assets	$3,742,000,000
Total discretionary tax-exempt	$3,742,000,000
Equity real estate assets	$3,742,000,000
Tax-exempt clients	151
Types of accounts managed	CEFGJ
Minimum separate account	$50,000,000
No. of portfolio managers	15
Size of research staff	13

TCW Realty Advisors, a real estate manager, makes equity investments in existing properties and forward commitments and convertible mortgages in office, industrial and retail property types in targeted metropolitan areas nationwide.

All assets were in equity real estate Jan. 1.

Vincent F. Martin Jr. is chief investment officer; Bruce L. Ludwig is client contact.

Tealwood Asset Management

1000 Shelard Parkway, St. Louis Park, Minn. 55426; (612) 544-9192

Total assets managed	$32,000,000
Total discretionary	$32,000,000
Total tax-exempt assets	$6,000,000
Total discretionary tax-exempt	$6,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	7
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	2

Tealwood Asset Management is an active and passive equity and balanced manager.

Its equity approach is value oriented, focusing on growth stocks and employing Graham & Dodd analysis. The firm starts with a top-down approach, then seeks securities that look cheap in the scenario.

The asset mix Jan. 1 was 70% stocks, 20% bonds and 10% cash.

The firm follows 30 stocks closely and 50, generally; 40% of research is generated internally.

George A. Hust is chief investment officer; David W. Hust is client contact.

TEL Advisors Inc. of Virginia

2333 Old Ivy Road, Charlottesville, Va. 22901; (804) 977-4407

Total assets managed	$7,000,000
Total discretionary	$4,000,000
Total tax-exempt assets	$2,000,000
Total discretionary tax-exempt	$2,000,000
Tax-exempt clients	3
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	1

TEL Advisors Inc. of Virginia is an active equity and balanced manager.

Its equity approach uses growth stocks and tactical asset allocation in combination with technical and fundamental analysis, dividing the equity component into securities purchased to hold and those purchased to sell. Its fixed-income approach uses closed-end funds that combine the interest rate decision with the currency decision. Options are used.

The asset mix Jan. 1 was 82% stocks and 18% cash.

The firm follows 25 stocks closely and 100, generally; 20% of research is generated internally.

Theodore E. Lord is chief investment officer and client contact.

Tempest, Isenhart, Chafee, Lansdowne & Associates

1380 Lawrence St., Suite 1050, Denver, Colo.; (303) 629-1917

Total assets managed	$492,000,000
Total discretionary	$315,000,000
Total tax-exempt assets	$307,000,000
Total discretionary tax-exempt	$239,000,000
Tax-exempt clients	24
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	5

Tempest, Isenhart, Chafee, Lansdowne & Associates Inc. is an active equity, active fixed-income and balanced manager.

Equity portfolios are fully invested and have a dominant industrial focus, characterized by a value orientation and identification of positive earnings momentum. Portfolios typically possess a lower risk profile. Its fixed-income approach uses interest rate anticipation. Investments are based on a value orientation, emphasizing high-quality, readily marketable securities.

The asset mix Jan. 1 was 75% stocks, 20% bonds and 5% cash.

The firm follows 65 to 70 stocks closely.

H. David Lansdowne is chief investment officer; David H. Squire is client contact.

Templeton International

500 E. Broward Blvd., Suite 2100, Fort Lauderdale, Fla. 33394; (305) 764-7390

Total assets managed	$2,534,000,000
Total discretionary	$2,534,000,000
Total tax-exempt assets	$2,264,000,000
Total discretionary tax-exempt	$2,264,000,000
International equity assets	$2,159,000,000
International fixed-income	$105,000,000
Tax-exempt clients	37
Types of accounts managed	CEFG
Minimum separate equity account	$10,000,000
Minimum separate bond account	$15,000,000
No. of portfolio managers	10
Size of research staff	6

Templeton International is an active domestic and international equity and fixed-income manager.

Its equity approach is bottom-up with relative value determined by a five-year projection of intrinsic worth. Graham & Dodd analysis is used. Its fixed-income approach uses interest rate anticipation and sector analysis. The approach is similar to its equity process, with some attention to interest rates and currency. Emphasis is always on quality. Fixed-income futures are used.

The asset mix Jan. 1 was 85% stocks, 5% bonds and 10% cash.

The firm follows 250 stocks closely and 800, generally; 50% of the research is generated internally.

The parent is Templeton, Galbraith & Hansberger Ltd.

John M. Templeton is chief investment officer; James R. Wood is client contact.

Texas Commerce Investment Management

600 Travis, Houston, Texas 77002; (713) 236-4444

Total assets managed	$5,248,000,000
Total discretionary	$5,248,000,000
Total tax-exempt assets	$2,166,000,000
Total discretionary tax-exempt	$2,166,000,000
Mortgage-backed assets	$6,000,000
401(k)/457 assets managed	$74,000,000
Tax-exempt clients	40
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	17
Size of research staff	9

Texas Commerce Investment Management Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity styles are based on the beliefs that stock prices reflect patterns of earning acceleration and deceleration; valuation and market psychology can be used to determine optimal purchase/sale times; and that in-house fundamental research augmented with quantitative analysis is paramount.

In fixed income, a risk management approach is employed that increases the probability of maximizing total return, limits and controls loss of principal and minimizes variation vs. a benchmark index. Fundamental, expectational and technical analyses are used extensively.

Options and financial futures are used.

The asset mix Jan. 1 was 16% stocks, 27% bonds, 56% cash and 1% mortgage-backed securities.

The firm follows 250 stocks closely and 7,000, generally; 80% of research is generated internally.

The parent is Texas Commerce Bancshares Inc.

William O. Leszinske is chief investment officer; Don G. Robinson is client contact.

1345 Realty Corp.

1345 Avenue of the Americas, 46th Floor, New York, N.Y. 10105; (212) 698-5924

Total assets managed	$110,000,000
Total discretionary	$110,000,000
Total tax-exempt assets	$110,000,000
Total discretionary tax-exempt	$110,000,000
Equity real estate assets	$110,000,000
Tax-exempt clients	11
Types of accounts managed	CG
Minimum separate account	$50,000,000

1345 Realty Corp., a real estate manager, seeks opportunities primarily in single- and multitenant net lease real estate with a strong emphasis on market fundamentals and the functional use of property.

Key investment criteria include price relative to replacement cost, effective rent relative to market rents, physical characteristics, functional obsolescence, multitenancy and subdivision potential.

All assets were in equity real estate Jan. 1.

The parent is Smith, Barney, Harris Upham & Co Inc.

Michael A. Marriott is chief investment officer; Ralph E. Heckert is client contact.

Thompson/Rubinstein Investment Management

715 S.W. Morrison St., Suite 604, Portland, Ore. 97205; (503) 224-1488

Total assets managed	$263,000,000
Total discretionary	$263,000,000
Total tax-exempt assets	$121,000,000
Total discretionary tax-exempt	$121,000,000
401(k)/457 assets managed	$25,000,000
Tax-exempt clients	52
Types of accounts managed	CEFG
Minimum separate account	$500,000
No. of portfolio managers	4
Size of research staff	4

Thompson/Rubinstein Investment Management Inc. is an active equity and active fixed-income manager.

The firm is a bottom-up, long-term investor, analyzing a company as if it were buying the business. Increasing earnings and dividends are important. Its fixed-income approach is based on interest rate anticipation and uses U.S. Treasury/high-quality corporates with maturities no longer than 10 years, averaging between four and seven years.

The asset mix Jan. 1 was 80% stocks and 20% bonds.

The firm follows 50 stocks closely and 75, generally; 90% of research is generated internally.

Fay L. Thompson and Richard A. Rubinstein are chief investment officers; Tim F. Ellis is client contact.

Thompson, Siegel & Walmsley Inc.

5000 Monument Ave., P.O. Box 6883, Richmond, Va. 23230; (804) 353-4500

Total assets managed	$2,231,000,000
Total discretionary	$2,231,000,000
Total tax-exempt assets	$1,821,000,000
Total discretionary tax-exempt	$1,821,000,000
401(k)/457 assets managed	$1,520,000,000
Tax-exempt clients	148
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	7

Thompson, Siegel & Walmsley Inc. is an active equity, active fixed-income and balanced manager.

It follows a conservative, risk-averse, value-oriented equity approach incorporating economic top-down analysis, valuation and fundamental security analysis and asset allocation tools as building block disciplines in a highly structured decision-making process.

Its fixed-income approach is a duration style that is also conservative and risk-averse, incorporating economic top-down analysis, fundamental credit analysis and sector spread analysis. Average maturities range from four to 12 years through the cycle. Quality is emphasized.

The asset mix Jan. 1 was 52% stocks, 40% bonds and 8% cash.

The firm follows 50 stocks closely and 250, generally; 50% of research is generated internally.

The parent is United Asset Management.

Matthew Thompson, John Siegel, S. Pierce Walmsley, Horace Whitworth, Paul Fenwerda, Michael Dugan and Elizabeth Cabel Jennings are chief investment officers; Peter D. Hartman is client contact.

Thompson, Unger & Plumb

8201 Excelsior Drive, Madison, Wis. 53717; (608) 831-1300

Total assets managed	$213,000,000
Total discretionary	$213,000,000
Total tax-exempt assets	$97,000,000
Total discretionary tax-exempt	$97,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	79
Types of accounts managed	CEFG
Minimum separate account	$500,000
No. of portfolio managers	4
Size of research staff	1

Thompson, Unger & Plumb Inc. is an active equity and bond, balanced and short-term manager.

Its equity approach centers on growth industries and growth companies that have superior balance sheets and returns. It buys, holds and sells as market and p/e ratio changes provide opportunities for improvement. Its fixed-income approach uses interest rate anticipation for longer-term trends.

The asset mix Jan. 1 was 61% stocks, 29.6% bonds and 9.4% cash.

The firm follows 100 stocks closely and 250, generally; 50% of the research is generated internally.

Raymond F. Unger is chief investment officer; William J. Conroy is client contact.

Thorson, Brown & Plunkett

43 Arch St., Greenwich, Conn. 06830; (203) 661-0666

Total assets managed	$260,000,000
Total discretionary	$260,000,000
Total tax-exempt assets	$51,000,000
Total discretionary tax-exempt	$51,000,000
Tax-exempt clients	17
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	4

Thorson, Brown & Plunkett Inc., an active equity and balanced manager, is theme oriented. The firm emphasizes growth investments with a bias toward small and midsize companies, particularly those that tend to be underowned institutionally. It focuses on identifying emerging trends, with capital concentrated in sectors and companies that will benefit.

Its fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 44% stocks, 42% bonds and 14% cash.

The firm follows 40 to 50 stocks closely and 100, generally; 20% of research is generated internally.

Petr A. Thorson is chief investment officer; Pegeen M. Burgess is client contact.

Tiffany Capital Advisors Inc.

15 Crow Canyon Court, Suite 200, San Ramon, Calif. 94583; (415) 831-1613

Total assets managed	$245,000,000
Total discretionary	$245,000,000
Total tax-exempt assets	$40,000,000
Total discretionary tax-exempt	$40,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	2

Tiffany Capital Advisors Inc., an active equity manager, invests in companies with historically persistent growth in operating earnings per share and whose recent experience shows an acceleration of such growth.

The asset mix Jan. 1 was 64% stocks, 1% bonds and 35% cash.

The firm follows 50 to 75 stocks closely and 350, generally; 70% of the research is generated internally.

Curtis O. Townsend and P. Don Lattimer are chief investment officers; Mr. Townsend is client contact.

Todd Investment Advisors

3160 First National Tower, Louisville, Ky. 40202; (502) 585-3121

Total assets managed	$3,276,000,000
Total discretionary	$574,000,000
Total tax-exempt assets	$3,227,000,000
Total discretionary tax-exempt	$525,000,000
Dedicated/immunized assets	$42,000,000
Mortgage-backed assets	$47,000,000
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	4

Todd Investment Advisors Inc. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach uses quantitative screens for price/value and earnings growth along with fundamental analysis of individual companies. It also applies top-down analysis for sector weightings and technical analysis of the market and individual securities.

The active fixed-income strategy optimizes total return with duration shifts based on interest rate forecasts. Hybrid bond index strategy enhances the return of a benchmark index with close tracking and less volatility of return.

The asset mix Jan. 1 was 9.8% stocks, 68% bonds, 13.2% cash and 9% mortgage-backed securities.

Bosworth M. Todd is chief investment officer; Robert B. Cregor Jr. is client contact.

Torch Energy Advisors Inc.

1221 Lamar, Suite 1600, Houston, Texas 77010; (713) 650-1246

Total assets managed	$750,000,000
Total discretionary	$750,000,000
Total tax-exempt assets	$200,000,000
Total discretionary tax-exempt	$200,000,000
Tax-exempt clients	15
Types of accounts managed	CEFG
Minimum separate account	$2,000,000

Torch Energy Advisors Inc., an oil and gas manager, acquires and manages direct investments in oil and gas properties. It builds diversified, non-leveraged portfolios with the primary goals of above average rates of return and high cash flows in the early years.

All assets were in oil and gas Jan. 1.

The parent is Torchmark Insurance Co.

J.P. Bryan is chief investment officer; Thomas Harper III is client contact.

Touche Remnant

50 Rockefeller Plaza, Third Floor, New York, N.Y. 10020; (212) 765-9560

Total assets managed	$34,000,000
Total discretionary	$10,000,000
Total tax-exempt assets	$10,000,000
Total discretionary tax-exempt	$10,000,000
International equity assets	$8,000,000
International cash assets	$2,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	1
Types of accounts managed	J
Minimum separate account	$10,000,000
No. of portfolio managers	6

Touche Remnant is an active international equity and fixed-income, real estate, short-term and tactical asset allocation manager.

Its equity approach has a bottom-up stock selection core using value screens surrounded by a disciplined country selection process.

In fixed income, the firm combines a fundamental approach to individual issues with an economic and technical analysis of the underlying markets and currencies.

It uses options and financial futures.

The asset mix Jan. 1 was 82% stocks and 18% cash.

The firm follows 500 stocks closely and 2,000, generally; 80% of research is generated internally.

The parent is Societe Generale.

Sir William Vincent is chief investment officer; William D. Rutherford is client contact.

Towneley Capital Management Inc.

144 E. 30th St., New York, N.Y. 10016; (212) 696-4130

Total assets managed	$300,000,000
Total discretionary	$300,000,000
Total tax-exempt assets	$300,000,000
Total discretionary tax-exempt	$300,000,000
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	5

Towneley Capital Management Inc. is an active equity and balanced manager.

Its equity approach is value oriented. For fixed income, the firm holds short-term (five- to seven-year), high-quality bonds until maturity.

Wesley G. McCain is chief investment officer; Sigrid Hess is client contact.

Townsend Asset Management Co. Inc.

45 Essex St., Hackensack, N.J. 07601; (201) 646-1511

Total assets managed	$27,000,000
Total discretionary	$13,000,000
Total tax-exempt assets	$1,000,000
Total discretionary tax-exempt	$1,000,000
Tax-exempt clients	6
Types of accounts managed	CF
Minimum separate account	$50,000
No. of portfolio managers	1

Townsend Asset Management Co. Inc. is an active equity, passive fixed-income, balanced and short-term manager.

Its equity approach buys shares of small companies with below-average financial leverage relative to peers when available at prices less than their intrinsic worth. Graham & Dodd analysis is used. For fixed income, interest rate bets are tightly controlled.

The asset mix Jan. 1 was 40% stocks, 25% bonds, 20% cash and 15% convertibles.

The firm follows 50 stocks closely and 100, generally; 90% of research is generated internally.

James W. Townsend is chief investment officer and client contact.

Trafalgar Capital Management

277 Lakeshore Road E., Suite 401, Oakville, Ontario L6J 1H9; (416) 842-5310

Total assets managed	$1,333,000,000
Total discretionary	$1,333,000,000
Total tax-exempt	$1,333,000,000
Total discretionary tax-exempt	$1,333,000,000
For subsidiaries of U.S. firms	$569,000,000
Equity real estate assets	$215,000,000
Non-North American equities	$84,000,000
Equity indexed assets	$643,000,000
Fixed-income indexed assets	$183,000,000
Tax-exempt clients	30
U.S. subsidiaries	14
Types of accounts managed	CG
Minimum separate account	$20,000,000
No. of portfolio managers	5
Size of research staff	4

Trafalgar Capital Management, a Canadian firm, is an active and passive equity, passive fixed-income, balanced, real estate, passive international equity, GIC, currency hedging and portfolio insurance manager.

Quantitative methods are used in its investment approaches. In real estate, it creates value through development or rehabilitation. Financial futures are used.

The firm runs a dynamic currency hedging program on $155 million, and manages the underlying assets.

The asset mix Jan. 1 was 43% Canadian stocks, 5% U.S. stocks, 14% bonds, 16% equity real estate, 6% international stocks, 4% GICs and 12% currency hedging.

It follows 100 stocks closely and 300, generally; all research is generated internally.

Tristram S. Lett is chief investment officer and client contact.

Trammell Crow Realty Advisors

2001 Ross Ave., Suite 3500, Dallas, Texas 75225; (214) 979-5202

Total assets managed	$17,000,000,000
Total discretionary	$2,800,000,000
Total tax-exempt assets	$2,800,000,000
Total discretionary tax-exempt	$2,800,000,000
Equity real estate assets	$2,800,000,000
Types of accounts managed	CG
Minimum separate account	$100,000,000

Trammell Crow Realty Advisors, a real estate manager, offers strategies that capitalize on the firm's national presence, hands-on leasing and property management capabilities and capital markets experience.

All assets were in equity real estate Jan. 1.

Thomas J. O'Gara is chief investment officer; Stanislaw Maliszewski is client contact.

Transamerica Investment Services Inc.

1150 S. Olive St., Los Angeles, Calif. 90015; (213) 742-3559

Total assets managed	$19,449,000,000
Total discretionary	$19,449,000,000
Total tax-exempt assets	$9,095,000,000
Total discretionary tax-exempt	$9,095,000,000
Equity real estate assets	$11,000,000
Mortgage assets	$270,000,000
Mortgage-backed assets	$2,057,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	12
Size of research staff	5

Transamerica Investment Services Inc. is an active equity, active fixed-income and short-term manager.

The allset mix Jan. 1 was 2.8% stocks, 66.4% bonds, 4.9% cash, 0.1% equity real estate, 3% mortgages and 22.8% mortgage-backed securities.

The parent is Transamerica Corp.

Gary U. Rolle is chief investment officer; Susan A. Silbert is client contact.

Trascott, Alyson, Craig Inc.

P.O. Box 770, 16-00 Route 2081, Fair Lawn, N.J. 07410; (201) 703-9000

Total assets managed	$23,000,000
Total discretionary	$23,000,000
Total tax-exempt assets	$14,000,000
Total discretionary tax-exempt	$14,000,000
Tax-exempt clients	11
Types of accounts managed	C
Minimum separate account	$250,000
No. of portfolio managers	2

Trascott, Alyson, Craig Inc. is an active equity, active bond, balanced and short-term manager.

SEA CONTAINERS LTD.

has announced an agreement to acquire the

WINDSOR COURT HOTEL
New Orleans, Louisiana

from an affiliate of

THE EQUITABLE LIFE ASSURANCE SOCIETY OF THE UNITED STATES

Management will be provided by

ORIENT-EXPRESS HOTELS INC.

The Prescott Group, Inc. acted as financial advisor to Sea Containers Ltd. and Orient-Express Hotels Inc.

PRESCOTT

THE PRESCOTT GROUP, INC.
767 FIFTH AVENUE
NEW YORK, NEW YORK 10153

Investment Advisors...

to employee benefit plans, foundations, endowments and substantial individuals.

Our basic investment philosophy — the prudent investment of assets in undervalued securities and special situations — was established a half century ago. This approach has preserved and appreciated capital over many market cycles.

David J. Greene and Company
Registered Investment Advisors

Its equity approach is contrarian and uses Graham & Dodd analysis. Its fixed-income approach is based on interest rate anticipation, generally maintaining short duration. Options are used.

The asset mix Jan. 1 was 40% stocks, 30% bonds and 30% cash.

Tracy D. Shagin is chief investment officer and client contact.

The Travelers Corp.

1 Tower Square, Hartford, Conn. 06183-6030; (203) 277-0111

Total assets managed	$54,694,000,000
Total discretionary assets	$50,457,000,000
Total tax-exempt assets	$21,434,000,000
Discretionary tax-exempt	$21,434,000,000
GICs	$8,439,000,000
Annuities	$10,619,000,000
Equity real estate assets	$226,000,000
Mortgage assets	$9,759,000,000
International equity assets	$4[illegible]0,000,000
International fixed-income	$28,000,000
Equity indexed assets	$808,000,000
Fixed-income indexed assets	$206,000,000
Dedicated/immunized assets	$7,000,000
Mortgage-backed assets	$1,265,000,000
401(k)/457 assets managed	$10,024,000,000
Tax-exempt clients	1,635
Types of accounts managed	CGJ
Minimum separate account	$25,000,000
No. of portfolio managers	14
Size of research staff	7

The Travelers Corp. is an active and passive domestic equity and fixed-income, active and passive international equity, passive international fixed-income, balanced, real estate, short-term, tactical asset allocation, private placements, options, timber and agricultural manager.

Richard Shima is the chief investment officer; John Prom is the client contact.

Portions of the assets listed above are managed on the firm's behalf by the following subsidiaries.

● TIMCO — Travelers Investment Management Co. manages $1.536 billion in U.S. institutional discretionary tax-exempt assets in domestic and international equity and bond index funds, active domestic equity and active international bond portfolios and asset allocation strategies. The firm also offers a comprehensive program of risk management services: asset protection strategies, foreign exchange management and options overwriting.

The firm runs $241 million in options overwriting strategies. None of the underlying assets is managed internally.

Geoffrey P. Raymond is chief investment officer; Phillip D. Leonardi is the client contact.

● Travelers Asset Management International — TAMIC manages $325 million in discretionary tax-exempt assets in active and passive fixed-income and tactical asset allocation strategies.

The firm offers asset/liability management for insurance companies and has experience in the management of captive insurance company and specialty insurance assets.

Glenn E. Murphy is the chief investment officer and client contact.

● Travelers Keystone Fixed Income Advisers, a joint venture with Keystone Custodial Funds, manages an active fixed-income account totaling $143 million.

Travelers Asset Management International

1 Tower Square, Hartford, Conn. 06183; (203) 277-0111

See entry for THE TRAVELERS CORP.

Travelers Investment Management Co.-TIMCO

90 State House Square, Suite 1200, Hartford, Conn. 06103; (203) 277-5841

See entry for THE TRAVELERS CORP.

Trendstat Capital Management Inc.

10805 Sunset Office Drive, Suite 400, St. Louis, Mo. 63127-1072; (314) 822-3500

Total assets managed	$46,000,000
Total discretionary	$46,000,000
Total tax-exempt assets	$15,000,000
Total discretionary tax-exempt	$15,000,000
401(k)/457 assets managed	$500,000
Tax-exempt clients	40
Types of accounts managed	CF
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

Trendstat Capital Management Inc. is an active equity, active fixed-income, balanced and managed futures manager.

Its equity approach is based on growth stocks and market timing, using econometric models and reducing risk by statistical stock selection, stop losses and market timing.

Its fixed-income approach is timing. It uses five measures of U.S. interest rates to invest in 30-year Treasury bonds or six-month T-bills.

The asset mix Jan. 1 was 94% stocks, 2% bonds and 4% cash.

The firm follows 300 stocks closely and 7,100, generally; all research is generated internally.

Thomas F. Basso is chief investment officer and client contact.

Trevor Stewart Burton & Jacobsen Inc.

90 Park Ave., New York, N.Y. 10016; (212) 972-8150

Total assets managed	$510,000,000
Total discretionary	$510,000,000
Total tax-exempt assets	$380,000,000
Total discretionary tax-exempt	$380,000,000
Tax-exempt clients	42
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	3

Trevor Stewart Burton & Jacobsen Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is top-down, stressing growth and value-oriented (low p/e) stocks.

Its fixed-income approach emphasizes interest rate anticipation.

The asset mix Jan. 1 was 35% stocks, 55% bonds and 10% cash.

The firm follows 50 stocks closely and 200, generally; 10% of research is generated internally.

George W. Jacobsen Jr. is chief investment officer; Stuart C. Williams is client contact.

Trinity Capital Advisors Inc.

2710 One First Union Center, 301 S. College St., Charlotte, N.C. 28202-6021; (704) 358-9020

Total assets managed	$175,000,000
Total discretionary	$175,000,000
Total tax-exempt assets	$115,000,000
Total discretionary tax-exempt	$115,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	17
Types of accounts managed	CF
Minimum separate account	$1,000,000
No. of portfolio managers	2

Trinity Capital Advisors Inc. is an active manager of short-term fixed-income portfolios.

Its major emphasis is on capital preservation and liquidity, while providing incremental returns above a passive management style. The firm utilizes both fundamental and technical analysis to identify value in the markets.

The asset mix Jan. 1 was 90% bonds and 10% cash.

David M. Ralston is chief investment officer; Alex W. McAlister is client contact.

Trinity Investment Management Corp.

1 Memorial Drive, Cambridge, Mass. 02142; (617) 621-1717

Total assets managed	$2,128,000,000
Total discretionary	$2,123,000,000
Total tax-exempt assets	$2,111,000,000
Total discretionary tax-exempt	$2,106,000,000
Tax-exempt clients	64
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	13
Size of research staff	8

Trinity Investment Management Corp., an active equity and balanced manager, is value-oriented and quantitative in its equity approach. Buys and sells are selected primarily by a composite ranking of eight proven submodels such as Graham & Dodd, cash flow plowback and dividend discount.

The fixed-income portion of the balanced accounts uses U.S. Treasury notes laddered out over five years.

The firm follows 200 stocks closely and generally; all research is generated internally.

Stanford Calderwood is chief investment officer and client contact.

Trusco Capital Management

50 Hurt Plaza, Suite 1400, Atlanta, Ga. 30303; (404) 586-6450

Total assets managed	$4,700,000,000
Total discretionary	$4,700,000,000
Total tax-exempt assets	$4,700,000,000
Total discretionary tax-exempt	$4,700,000,000
401(k)/457 assets managed	$650,000,000
Tax-exempt clients	207
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	13
Size of research staff	6

Trusco Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is bottom up, screening a large universe of stocks for investment based on valuation levels and earnings trends.

Its primary fixed-income approach adds value by identifying and acting upon opportunity and risk. Yield curve analysis, sector swaps and arbitrage are used.

The asset mix Jan. 1 was 52% stocks, 40% bonds and 8% cash.

The firm follows 400 stocks closely and 1,800, generally; 75% of research is generated internally.

The parent is Trust Co. Bank.

Douglas S. Phillips is chief investment officer; Bob M. Farmer is client contact.

The Trust Co. of Oklahoma

6307 Waterford Blvd., Suite 100, Oklahoma City, Okla. 73118; (405) 848-8899

Total assets managed	$320,000,000
Total discretionary assets	$212,000,000
Total tax-exempt assets	$122,000,000
Total discretionary tax-exempt	$109,000,000
International equity assets	$1,000,000
401(k)/457 plan assets	$8,000,000
Tax-exempt clients	129
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	1
Size of research staff	2

The Trust Co. of Oklahoma is an active and passive equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach is flexible, using a top-down method that targets macroeconomic trends and then focuses on industry groups. Graham & Dodd analysis is used in final stock selection.

Its fixed-income approach uses a ladder structure, with a 12-year maximum maturity. The style is passive, but accounts are monitored regularly and sector analysis is used to enhance income and/or quality.

Options are used.

The asset mix Jan. 1 was 35% stocks, 50% bonds, 14% cash and 1% international stocks.

Gary Phillpott is chief investment officer; Charles Turci is client contact.

Trust Co. of the West

400 S. Hope St., Los Angeles, Calif. 90071; (213) 683-4000

Total assets managed	$17,367,000,000
Total discretionary assets	$17,367,000,000
Total tax-exempt assets	$14,710,000,000
Discretionary tax-exempt	$14,710,000,000
International equity assets	$1,484,000,000
Dedicated/immunized assets	$174,000,000
Mortgage-backed assets	$818,000,000
Tax-exempt clients	273
Types of accounts managed	CEFGJ
Minimum separate account	$20,000,000
No. of portfolio managers	29
Size of research staff	31

Trust Co. of the West is an active domestic and global equity and fixed-income, balanced, short-term, convertible, high-yield bonds, oil and gas, private placements, distressed securities and Latin American investments manager.

Its equity approach employs sector rotation, using top-down analysis with the goal of identifying changes before they are generally perceived and shifting between asset categories and industries to take advantage of change. Its fixed-income approach uses interest rate anticipation and is top-down with a goal to catch cyclical shifts in interest rates.

The asset mix Jan. 1 was 34.5% stocks, 19.7% bonds, 9% cash, 4.8% mortgage-backed securities and 32% oil and gas, distressed securities, private placements, global asset allocation and Latin American investments.

Ernest O. Ellison is chief investment officer; Thomas E. Larkin Jr. is client contact.

Trust Fund Advisors

111 Massachusetts Ave. N.W., Washington, D.C. 20001; (202) 682-4994

Total:	
Assigned to other firms	$587,000,000
Tax-exempt:	
Assigned to other firms	$587,000,000
Tax-exempt clients	20
Types of accounts managed	J
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	5

Trust Fund Advisors, a manager of managers, offers active equity, active and passive fixed-income, balanced and short-term management through external managers.

The equity approach is value oriented and opportunistic, targeting out-of-favor stocks of sound companies. Its fixed-income approach is intermediate and conservative, avoiding risk and capitalizing on inefficiencies in the markets. Sector and yield curve analysis are used.

The asset mix Jan. 1 was 40% stocks, 57% bonds and 3% cash.

The firm follows 200 stocks closely and 100, generally; 85% of research is generated internally.

The parent is ULLICO Inc.

William Cross is chief investment officer; Howard Reich and Bruce Dereschuk are client contacts.

TSA Capital Management

700 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 614-7311

Total assets managed	$706,000,000
Total discretionary	$706,000,000
Total tax-exempt assets	$706,000,000
Total discretionary tax-exempt	$706,000,000
Tax-exempt clients	15
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	7

TSA Capital Management is an active domestic equity and fixed-income, balanced, active and passive international equity and fixed-income, TAA, global asset allocation and active currency manager.

The firm offers three equity approaches: U.S. and global TAA and core equity management, emphasizing value. Fixed-income portfolios are managed under U.S. and global TAA strategies. Options and financial futures are used.

The firm runs overlay strategies on $1.73 billion, of which it manages $302 million of the underlying assets.

The asset mix Jan. 1 was 86% stocks and 14% bonds.

The firm follows 150 stocks closely and 1,000, generally; all research is generated internally.

The parent is Trust Services of America.

Roger G. Clarke is chief investment officer; Richard Boling is client contact.

Tukman Capital Management

60 E. Sir Francis Drake Blvd., Larkspur, Calif. 94939; (415) 461-6833

Total assets managed	$800,000,000
Total discretionary	$800,000,000
Total tax-exempt assets	$700,000,000
Total discretionary tax-exempt	$700,000,000
Tax-exempt clients	38
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	2

Tukman Capital Management, an active equity manager, is value oriented, focusing on highly profitable, cash-generating companies purchased at moderate p/e ratios.

The asset mix Jan. 1 was 86% stocks and 14% bonds.

Melvin T. Tukman is chief investment officer; Daniel L. Grossman is client contact.

Turner Neill Investment Partners Inc.

300 Berwyn Park, Suite 120, Berwyn, Pa. 19312; (215) 251-0268

Total assets managed	$206,000,000
Total discretionary	$206,000,000
Total tax-exempt assets	$206,000,000
Total discretionary tax-exempt	$206,000,000
Tax-exempt clients	18
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	7

Turner Neill Investment Partners Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on growth stocks at reasonable prices. Its fixed-income approach is duration matched.

The asset mix Jan. 1 was 65% stocks and 35% bonds.

The firm follows 800 stocks closely and 3,500, generally; 5% of the research is generated internally.

Robert E. Turner is chief investment officer; Stephen Kneeley is client contact.

Mark Twain Bank

P.O. Box 14259-A, St. Louis, Mo. 63178; (314) 889-0715

Total assets managed	$600,000,000
Total discretionary assets	$400,000,000
Total tax-exempt assets	$300,000,000
Total discretionary tax-exempt	$300,000,000
Dedicated/immunized bonds	$5,000,000
Mortgage-backed assets	$15,000,000
401(k)/457 plan assets	$100,000,000
Tax-exempt clients	190
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	3

Mark Twain Bank is an active equity, active fixed-income and balanced manager.

The bank is a bottom-up stock picker, identifying stocks with above-average earnings growth in large- to medium-capital stocks with relative value overlays.

Its fixed-income approach uses 80% to 90% government agency issues with a maturity range of two to 15 years. The firm varies the average maturity from two to 10 years depending on interest rate trends.

The asset mix Jan. 1 was 30% stocks, 40% bonds, 5% mortgage-backed securities and 15% cash.

The bank follows 75 stocks closely and 600, generally.

The parent is Mark Twain Bancshares Inc.

Carl C. Enloe is chief investment officer; Michele Kopolow is client contact.

Twin Capital Management

2414 Lytle Road, Suite 300, Pittsburgh, Pa. 15102; (412) 833-0022

Total assets managed	$109,000,000
Total discretionary	$109,000,000
Total tax-exempt assets	$109,000,000
Total discretionary tax-exempt	$109,000,000
Tax-exempt clients	2
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	2

Twin Capital Management is an active equity, passive fixed-income and TAA manager.

The firm uses a dynamically weighted multifactor model that differentiates across a broad universe. Portfolios are optimized seeking maximum information ratio relative to well-specified client benchmarks. The firm has special expertise in market-neutral, long/short equity hedging. Financial futures are used.

The firm runs $50 million in a passive fixed-income overlay using bond futures; it manages all of the underlying assets.

All assets were in stocks Jan. 1.

The firm follows 900 stocks closely and 3,000, generally; all research is generated internally.

Geoffrey Gerber is chief investment officer; Tim Stack is client contact.

U

UBS Phillips & Drew International Investment

Triton Court, 14 Finsbury Square, London EC2A 1PD U.K.; 71-588-7114

Total assets managed	$492,000,000
Total discretionary	$492,000,000
Total tax-exempt assets	$7,000,000
Total discretionary tax-exempt	$7,000,000
International equity assets	$7,000,000
Tax-exempt clients	1
Types of accounts managed	J
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	34

UBS Phillips & Drew International Investment Ltd. is an active international/global equity manager.

Its value-oriented equity approach is based on fundamental analysis of macroeconomic and company-specific factors, focusing on stocks selling at below-market valuations with sound or improving fundamentals and strong growth potential. Its primary fixed-income approach is based on identifying currencies that are competitive, have high yields, low inflation and sound economic and monetary policies. Options and fixed-income futures are used.

The asset mix Jan. 1 was 88.5% stocks and 11.5% bonds.

The firm follows 1,000 stocks closely and 10,000, generally; 75% of the research is generated internally.

The parent is UBS Asset Management (UK) Ltd.

James P. McCaughan is chief investment officer; George M. Jamgochian, (212) 319-2009, is client contact.

Union Capital Advisors

445 S. Figueroa St., 19th Floor, Los Angeles, Calif. 90071; (213) 236-6747

Total assets managed	$2,800,000,000
Total discretionary	$2,800,000,000
Total tax-exempt assets	$1,100,000,000
Total discretionary tax-exempt	$1,100,000,000
Equity real estate assets	$55,000,000
Mortgage assets	$55,000,000
International equity assets	$11,000,000
401(k)/457 assets managed	$574,000,000
Tax-exempt clients	15
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	16
Size of research staff	4

Union Capital Advisors is an active domestic and international equity, active fixed-income, balanced, real estate and currency overlay manager.

Its growth-oriented equity approach is based on value. The firm seeks companies with earnings momentum discounted in current market valuation. Fundamental research helps find companies with financial flexibility to expand market share and diversify products.

Its fixed-income approach uses analysis of yield curve and anticipation of rating changes. Sector swaps are also important in adding more yield with similar risk or similar yield with less risk.

The firm runs a currency overlay program on $10 million; all of the underlying assets are managed internally.

The asset mix Jan. 1 was 25% stocks, 18% bonds, 56% cash, 0.5% equity real estate and 0.5% mortgages.

The firm follows 200 stocks closely and 700, generally; 50% of the research is generated internally.

The parent is Bank of Tokyo Ltd.

Richard H. Earnest is chief investment officer; Robert S. Preston is client contact.

Union Capital Management

1100 Poydras St., Suite 1400, New Orleans, La. 70163; (504) 585-7320

Total assets managed	$27,000,000
Total discretionary	$27,000,000
Total tax-exempt assets	$27,000,000
Total discretionary tax-exempt	$27,000,000
Mortgage-backed assets	$9,000,000
Tax-exempt clients	1
Types of accounts managed	G
Minimum separate account	$1,000,000
No. of portfolio managers	1

Union Capital Management, a passive fixed-income manager, uses a stratified sampling that provides the most efficient method of replicating bond market returns. Limited emphasis is placed on interest rate forecasts.

The asset mix Jan. 1 was 45% bonds, 20% cash and 35% mortgage-backed securities.

Kenneth J. Canepa is chief investment officer and client contact.

Union Labor Life Insurance

111 Massachusetts Ave. N.W., Washington, D.C. 20001; (202) 682-0900

Total assets managed	$1,921,000,000
Total discretionary assets	$1,556,000,000
Total tax-exempt assets	$1,556,000,000
Total discretionary tax-exempt	$1,556,000,000
GICs	$410,000,000
Mortgage assets	$442,000,000
Mortgage-backed assets	$25,000,000
Tax-exempt clients	414
Types of accounts managed	CGJ
No. of portfolio managers	7
Size of research staff	8

Union Labor Life Insurance is an active equity and fixed-income, short-term and mortgage manager.

Its equity approach is value-oriented and opportunistic, targeting out-of-favor stocks of sound companies. Its fixed-income approach is conservative, avoiding risk and capitalizing on inefficiencies in the markets.

Its mortgage account invests in long-term first mortgages.

The insurer follows 120 stocks closely and 400, generally; 25% of research is generated internally.

The parent is ULLICO Inc.

Herbert C. Canapary is chief investment officer;

John Stephan is client contact.

United Capital Management
1 United Bank Center, 1700 Lincoln St., Suite 3301, Denver, Colo. 80274-0077; (303) 831-9474

Total assets managed	$3,580,000,000
Total discretionary assets	$3,580,000,000
Total tax-exempt assets	$3,449,000,000
Total discretionary tax-exempt	$3,449,000,000
Tax-exempt clients	35
Types of accounts managed	CFGJ
Minimum separate equity account	$20,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	5
Size of research staff	1

United Capital Management is an active equity, active fixed-income and balanced manager.

It is a contrarian/value equity investor, seeking price-depressed, out-of-favor stocks that have major rebound potential over three years. A strict sell discipline is followed.

Its fixed-income approach is active and long term, focusing on major changes in interest rate trends. Business cycle analysis provides the framework for the rate outlook.

The asset mix Jan. 1 was 71.8% stocks, 17.6% bonds and 10.6% cash.

The bank follows 80 stocks closely and 120, generally.

The parent is United Banks of Colorado Inc.

W. Lon Schreur is chief investment officer; Denise B. Johnson is client contact.

United Jersey Bank
223 Moore St., Hackensack, N.J. 07006; (201) 646-5631

Total assets managed	$1,600,000,000
Total discretionary assets	$1,600,000,000
Total tax-exempt assets	$625,000,000
Total discretionary tax-exempt	$550,000,000
Tax-exempt clients	478
Types of accounts managed	CEFJ
Minimum separate account	$1,000,000

United Jersey Bank is a balanced and short-term manager.

Its equity approach uses low p/e stocks and may vary the capitalization stressed over long cycles. Sector rotation is used, with each portfolio manager having equity research/sector responsibility.

Its fixed-income approach uses interest rate anticipation and sector analysis. Investment-grade securities are used as alternatives to Treasuries on a relative basis.

The parent is UJB Financial Corp.

John W. Gustafson is chief investment officer; Robert T. Garty is client contact.

United Missouri Investment Counsel Service
P.O. Box 419226, Kansas City, Mo. 64141; (816) 556-7351

Total assets managed	$5,765,000,000
Total discretionary	$5,765,000,000
Total tax-exempt assets	$3,639,000,000
Total discretionary tax-exempt	$3,639,000,000
Mortgage-backed assets	$146,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$500,000
No. of portfolio managers	14
Size of research staff	4

United Missouri Investment Counsel Service is an active and passive equity, passive fixed-income, balanced and short-term manager.

Its equity approach focuses on companies that have exhibited above-average unit sales growth and pricing flexibilities and maintain strong balance sheet characteristics. Its fixed-income approach emphasizes maturity shifts based on the interest rate outlook. Key forecasting tools are related to manufacturing operating rates.

The asset mix Jan. 1 was 24% stocks, 47% bonds, 25% cash and 4% mortgage-backed securities.

The firm follows 125 stocks closely and 200, generally; 10% of research is generated internally.

The parent is United Missouri Bancshares.

Stuart L. Murdock is chief investment officer; David B. Anderson is client contact.

United National Bank
202 Park Ave., Plainfield, N.J. 07061; (908) 756-5000

Total assets managed	$518,000,000
Total discretionary assets	$314,000,000
Total tax-exempt assets	$90,000,000
Total discretionary tax-exempt	$70,000,000
International equity assets	$1,000,000
Mortgage-backed assets	$2,000,000
401(k)/457 plan assets	$1,000,000
Tax-exempt clients	85
Types of accounts managed	CEF
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	3

United National Bank is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach uses growth stocks, seeking above-average growth in earnings, both historical and projected, and below-average debt-to-capital ratios. Fixed-income investments have a maturity range between one and 10 years. Laddered maturities are used and issues held to maturity.

The asset mix Jan. 1 was 34% stocks, 47% bonds, 17% cash and 2% mortgage-backed securities.

The bank follows 75 stocks closely and 125, generally.

The parent is United National Bancorp.

Duncan Lasher is chief investment officer; Barbara Rushing is client contact.

U.S. Bank
Main & Franklin Streets, Johnstown, Pa. 15901; (814) 533-5397

Total assets managed	$161,000,000
Total discretionary assets	$161,000,000
Total tax-exempt assets	$78,000,000
Total discretionary tax-exempt	$78,000,000
Equity real estate assets	$160,000
Mortgage assets	$310,000
Mortgage-backed assets	$14,000,000
401(k)/457 plan assets	$3,000,000
Tax-exempt clients	80
Types of accounts managed	CEFG
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	1

U.S. Bank is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its bottom-up equity approach picks stocks using a value orientation. For fixed-income, it uses laddered maturities with sector diversification.

The asset mix Jan. 1 was 13.6% stocks, 59% bonds, 9.5% cash, 0.2% equity real estate, 0.4% mortgages and 17.3% mortgage-backed securities.

Judith Duchene is chief investment officer; Darryl Myers is client contact.

United States National Bank of Galveston
P.O. Box 179, Galveston, Texas 77553; (409) 763-1151

Total assets managed	$500,000,000
Total discretionary	$500,000,000
Total tax-exempt assets	$245,000,000
Total discretionary tax-exempt	$245,000,000
401(k)/457 assets managed	$15,000,000
Tax-exempt clients	320
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	2

United States National Bank of Galveston is an active equity, active fixed-income, balanced and short-term manager.

A long-term investor, the bank uses a value-oriented equity approach. It seeks issues allowing considerable downside risk protection by providing comparatively high-dividend yields and low p/e multiples. The fixed-income approach uses interest rate anticipation and sector analysis. Options are used.

The asset mix Jan. 1 was 85% equities, 5% bonds and 10% cash.

The firm follows 100 stocks closely and 300, generally.

The parent is Cullen/Frost Bankers Inc.

Harris L. Kempner Jr. is chief investment officer; Freddie B. Meier is client contact.

U.S. Trust Co. of New York
114 W. 47th St., New York, N.Y. 10036; (212) 852-3913

Total assets managed	$17,500,000,000
Total discretionary assets	$17,500,000,000
Total tax-exempt assets	$2,800,000,000
Total discretionary tax-exempt	$2,800,000,000
International equity assets	$50,000,000
Equity indexed assets	$20,000,000
Fixed-income indexed assets	$100,000,000
Tax-exempt clients	185
Types of accounts managed	CEFGJ
Minimum separate account	$3,000,000
No. of portfolio managers	10
Size of research staff	15

U.S. Trust Co. of New York is an active and passive equity, active and passive fixed-income, balanced, active international/global equity and short-term manager.

Its active stock selection methodology uses strategies as valuation benchmarks and themes as indicators of trends generating long-term value. Portfolios are diversified. It has a slightly contrarian perspective.

Its active fixed-income approach uses total rate of return management over an interest rate cycle, focusing on rate forecasting and credit and sector/spread analysis.

The parent is U.S. Trust Corp.

Frederick B. Taylor is chief investment officer; Brian J. Keeney is client contact.

U.S. Trust Co. of California
555 S. Flower St., Suite 2700, Los Angeles, Calif. 90071-2429; (213) 488-4000

Total assets managed	$890,000,000
Total discretionary assets	$650,000,000
Total tax-exempt assets	$285,000,000
Total discretionary tax-exempt	$285,000,000
Tax-exempt clients	73
Types of accounts managed	CF
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	4

U.S. Trust Co. of California N.A. is an active equity, active fixed-income and balanced manager.

Its quantitative, value-oriented equity approach is risk averse, seeking consistency of returns over a market cycle and above-average performance.

Its fixed-income approach is disciplined, with emphasis placed on maturity selection reacting to interest rates, not anticipating them. U.S. governments or equivalents are used extensively.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

The bank follows 100 stocks closely and 200,

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generally; 45% of research is generated internally.
The parent is U.S. Trust Corp.
Robert M. Raney is chief investment officer; Mark K. Tait is client contact.

U.S. Trust Co. of Texas
500 N. Akard, LB-46, Dallas, Texas 75201; (214) 740-4222

Total assets managed	$440,000,000
Total discretionary assets	$440,000,000
Total tax-exempt assets	$50,000,000
Total discretionary tax-exempt	$50,000,000
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	4

U.S. Trust Co. of Texas is an active equity, active fixed-income, balanced, short-term, and municipal bond manager.
Its equity approach uses growth and value strategies to target both medium-sized growth companies with excellent balance sheets and returns setting at historically low valuations, and out-of-favor large companies with solid fundamentals.
Its fixed-income approach uses interest rate anticipation and sector analysis, targeting investments through a conservative selection of appropriate sectors, and with no maturities greater than 10 years.
The asset mix Jan. 1 was 35% stocks, 57% bonds and 8% cash.
The bank follows 75 stocks closely and 200, generally; 75% of research is generated internally.
The parent is U.S. Trust Corp.
William J. Goodwin is chief investment officer; Rod Riggins is client contact.

Unity Management Inc.
2001 Marcus Ave., Lake Success, N.Y. 11042; (516) 437-2200

Total assets managed	$590,000,000
Total discretionary	$590,000,000
Total tax-exempt assets	$590,000,000
Total discretionary tax-exempt	$590,000,000
Tax-exempt clients	70
Types of accounts managed	FJ
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Unity Management Inc. is an active equity, active fixed-income, balanced and short-term manager.
Its equity approach focuses on NYSE large-cap stocks, combining fundamental and technical analysis in a top-down, value-oriented, sector rotation approach. Its fixed-income approach concentrates on interest rate forecasting, duration adjustment, sector analysis and security analysis in selecting instruments to maximize returns within client risk constraints.
The asset mix Jan. 1 was 30% stocks, 60% bonds and 10% cash.
The firm follows 100 closely and 500, generally; 50% of research is generated internally.
Irving Decter is chief investment officer; Thomas J. Foley and Kenneth Decter are client contacts.

E. Scott Urdang Real Estate Advisors
925 Harvest Drive, Suite 210, Blue Bell, Pa. 19422; (215) 643-9500

Total assets managed	$100,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$100,000,000
Total discretionary tax-exempt	$100,000,000
Equity real estate assets	$100,000,000
Tax-exempt clients	2
Types of accounts managed	C
Minimum separate account	$15,000,000

E. Scott Urdang Real Estate Advisors, a real estate manager, takes a contrarian, value-oriented and opportunistic approach. The firm only offers separate accounts to public and corporate funds.
All assets were in equity real estate Jan. 1.
David Blum is chief investment officer; E. Scott Urdang is client contact.

V

Valenzuela Capital Management Inc.
14 Wall St., 18th Floor, New York, N.Y. 10023; (212) 227-3590

Total assets managed	$60,000,000
Total discretionary	$60,000,000
Total tax-exempt assets	$60,000,000
Total discretionary tax-exempt	$60,000,000
Tax-exempt clients	5
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	2

Valenzuela Capital Management Inc., an active equity manager, uses growth and value strategies.
The asset mix Jan. 1 was 90% stocks and 10% cash.
The firm follows 80 stocks closely and 120, generally; 80% of research is generated internally.
Thomas M. Valenzuela is chief investment officer and client contact.

Valley Capital Management
P.O. Box 71 A-806, Phoenix, Ariz. 85001; (602) 261-1471

Total assets managed	$5,081,000,000
Total discretionary	$3,058,000,000
Total tax-exempt assets	$1,129,000,000
Total discretionary tax-exempt	$666,000,000
Equity real estate assets	$12,000,000
Mortgage assets	$232,000,000
401(k)/457 assets managed	$135,000,000
Tax-exempt clients	245
Types of accounts managed	CEFG
Minimum separate account	$300,000
No. of portfolio managers	13
Size of research staff	3

Valley Capital Management is an active and passive equity and fixed-income, balanced, real estate and short-term manager.
Its equity approach is value oriented, focusing on growth companies positioned to benefit from long-term trends. Its fixed-income approach uses interest rate anticipation, with sector selection adding incremental return. It uses options.
In real estate, the firm concentrates on Arizona-based commercial mortgages with adjustable interest rates, call provisions and equity participation.
The asset mix Jan. 1 was 20% stocks, 21% bonds, 16% cash, 2% equity real estate, 35% mortgages and 4% other.
The firm follows 200 stocks closely and 1,200, generally; 45% of research is generated internally.
The parent is Valley National Corp.
Lyle D. Wurtz is chief investment officer; Robert H. Brown and Robert E. Withers are client contacts.

Value Line Asset Management
711 Third Ave., New York, N.Y. 10017-4064; (212) 490-1308

Total assets managed	$3,293,000,000
Total discretionary	$3,293,000,000
Total tax-exempt assets	$1,131,000,000
Total discretionary tax-exempt	$1,131,000,000
401(k)/457 assets managed	$20,000,000
Tax-exempt clients	16
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	15
Size of research staff	75

Value Line Asset Management is an active equity, balanced and tactical asset allocation manager with small-cap expertise.
Its equity approach is quantitative, using growth and emerging growth stocks. Market timing and a value tilt are employed to identify opportunities. Its fixed-income approach uses interest rate anticipation. Stock-index futures are used.
The asset mix Jan. 1 was 80% equities, 4% bonds and 16% cash.
The firm follows 150 stocks closely and 400, generally; 75% of the research is generated internally.
The parent is Value Line.
Samuel Eisenstadt is chief investment officer. Stewart P. Zobian and Charles Heebner are client contacts for equity and fixed-income investments; John K. Webster is new business contact.

Van Cleef Jordan & Wood
230 Park Ave., New York, N.Y. 10169; (212) 986-2600

Total assets managed	$215,000,000
Total discretionary	$175,000,000
Total tax-exempt assets	$25,000,000
Total discretionary tax-exempt	$25,000,000
International equity assets	$1,000,000
International fixed income assets	1,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	40
Types of accounts managed	CEF
Minimum separate account	$400,000
No. of portfolio managers	6
Size of research staff	2

Van Cleef Jordan & Wood Inc. is an active equity, active fixed-income and balanced manager with special emphasis on growth, value and sector rotation. Its fixed-income management consists of shifting duration, maturity, sector rotation and anticipation of quality upgrades and downgrades.
Richard F.F. Nichols Jr. is chief investment officer and client contact.

Van Eck Associates Corp.
122 E. 42nd St., New York, N.Y. 10168; (212) 687-5200

Total assets managed	$1,215,000,000
Total discretionary	$1,215,000,000
Total tax-exempt assets	$241,000,000
Total discretionary tax-exempt	$241,000,000
International equity assets	$67,000,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	8

Van Eck Associates Corp. is an active international/global equity, fixed-income and balanced and gold-related manager.
Macroeconomic trends determine global equity asset allocation among countries (currencies) and industries. The firm emphasizes quality, liquidity and low volatility. In fixed income, macroeconomic analysis sets interest rate and currency judgments. Government bonds, global diversification and hedging strategies are used. Gold serves as a hedge against inflation and economic adversity. Options and financial futures are used.
The asset mix Jan. 1 was 35% equities and 65% gold bullion.
The firm follows 250 stocks closely and 500, generally; 40% of the research is generated internally.
John C. Van Eck is chief investment officer; Robin Emi is client contact.

P&I spotlights the fastest growing managers July 8.

Van Kampen Merritt Investment Advisory Corp.
1001 Warrenville Road, Lisle, Ill. 60532; (708) 719-6000

Total assets managed	$10,000,000,000
Total discretionary	$10,000,000,000
Total tax-exempt assets	$350,000,000
Total discretionary tax-exempt	$350,000,000
Mortgage-backed assets	$280,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	11
Size of research staff	12

Van Kampen Merritt Investment Advisory Corp. is an active domestic and international bond and cash manager.
The firm uses a disciplined, value-added style that limits dependence on interest rate anticipation, emphasizes duration matching and searches for relative value among sectors and issues. Fixed-income futures are used.
The asset mix Jan. 1 was 15% bonds, 5% cash and 80% morigage-backed securities.
The parent is Xerox Financial Services.
Dennis J. McDonnell is chief investment officer; John M. McCareins is client contact.

Van Strum & Towne Inc.
505 Sansome St., Suite 1001, San Francisco, Calif. 94111; (415) 981-3455

Total assets managed	$261,000,000
Total discretionary	$51,000,000
Total tax-exempt assets	$39,000,000
Total discretionary tax-exempt	$24,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	11
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	6

Van Strum & Towne Inc. is an active equity, active fixed-income and balanced manager.
Its equity approach emphasizes growth stocks. Portfolios are characterized by low volatility and turnover, above average earnings growth and financial strength, and a skewed industry weighting relative to the S&P 500. Its fixed-income approach uses interest rate anticipation and sector analysis. Investments are used in balanced accounts as a defensive and income-generating sector of the portfolio.
The asset mix Jan. 1 was 37% stocks, 37% bonds and 26% cash.
The firm follows 50 stocks closely; 30% of the research is generated internally.
Christopher J. McClellan is chief investment officer; Woodward Kingman is client contact.

The Vanguard Group Inc.
Vanguard Financial Center, Valley Forge, Pa. 19482; (215) 648-6000

Total assets managed	$57,232,000,000
Internal discretionary	$35,735,000,000
Assigned to other firms	$21,497,000,000
Total tax-exempt assets	$12,333,000,000
Internal discretionary	$6,147,000,000
Assigned to other firms	$6,186,000,000
International equity assets	$661,000,000
Equity indexed assets	$1,738,000,000
Fixed-income indexed assets	$105,000,000
401(k)/457 assets managed	$4,341,000,000
Tax-exempt clients	1,586
Types of accounts managed	CEFG

The Vanguard Group Inc. is a passive equity, active and passive fixed-income and GIC manager. Active equity, balanced, short-term tactical asset allocation and international management are handled by external managers.
Equity approaches offered are passive, quantitative, growth, emerging growth and low p/e. Graham & Dodd analysis is used. Its fixed-income strategies are passive or based on sector analysis.
John C. Bogle is chief investment officer; James H. Gately is client contact.

Vaughan, Nelson, Scarborough & McConnell
6300 Texas Commerce Tower, Houston, Texas 77002; (713) 224-2545

Total assets managed	$1,000,000,000
Total discretionary	$1,000,000,000
Total tax-exempt assets	$800,000,000
Total discretionary tax-exempt	$800,000,000
Tax-exempt clients	80
Types of accounts managed	CEFGJ
Minimum separate account	$2,000,000
No. of portfolio managers	6

Vaughan, Nelson, Scarborough & McConnell Inc. is an active equity, active fixed-income and balanced manager.
Its equity approach emphasizes a "middle 60%" strategy to downside protection and stable growth using individual issue selection through original primary research, active asset allocation and proprietary valuation analysis. Its fixed-income approach is driven by interest rate anticipation, horizon analysis and sector analysis.
Eugene H. Vaughan Jr. is chief investment officer.

Vector Money Management
P.O. Box 3319, Jackson, Miss. 39207; (601) 969-2106

Total assets managed	$25,000,000
Total discretionary	$25,000,000
Total tax-exempt assets	$23,000,000
Total discretionary tax-exempt	$23,000,000
Tax-exempt clients	27
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	3

Vector Money Management Inc. is an active equity, active fixed-income and balanced manager.
Its top-down, secular equity approach monitors changing economic, social and political climates to determine the best sectors/industries. Fundamental analysis is then applied to specific companies. In fixed income, it studies economic and political activity to predict inflation and interest rate trends. Options are used.
The asset mix Jan. 1 was 48% stocks, 44% bonds and 8% cash.
The firm follows 25 stocks closely and 50, generally; 25% of research is generated internally.
Ashby M. Foote III is chief investment officer; R. Mark Fields is client contact.

Vengrowth Capital Funds
145 Wellington St. W., Suite 200, Toronto, Ontario M5J 1H8; (416) 971-6656

See entry for AMI PARTNERS INC.

Verus Capital
45 Broadway, New York, N.Y. 10006; (212) 943-9200

See entry for ARNHOLD AND S. BLEICHROEDER.

Vilas-Fischer Associates
1 World Trade Center, Room 2101, New York, N.Y. 10048; (212) 466-0710

Total assets managed	$215,000,000
Total discretionary	$215,000,000
Total tax-exempt assets	$77,000,000
Total discretionary tax-exempt	$77,000,000
Tax-exempt clients	169
Types of accounts managed	CEF
Minimum separate account	$400,000
No. of portfolio managers	6

Vilas-Fischer Associates is an active equity and active fixed-income manager.
The firm takes a flexible, value-oriented approach to investing in stocks and bonds that calls for significant cash reserves when expected returns do not compensate for inherent risks. Market timing/tactical asset allocation and Graham & Dodd analysis are used in equities; interest rate anticipation is used in fixed income.
The asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash.
The parent is Friends Provident.
G.M. Rouzee Jr. is chief investment officer; David H. Carnahan Jr. is client contact.

Virginia Investment Counselors Inc.
1500 Crestar Bank Building, Norfolk, Va. 23510; (804) 623-2491

Total assets managed	$509,000,000
Total discretionary	$498,000,000
Total tax-exempt assets	$215,000,000
Total discretionary tax-exempt	$210,000,000
Equity real estate assets	$5,000,000
Mortgage assets	$5,000,000
International equity assets	$10,000,000
International fixed-income	$5,000,000
Mortgage-backed assets	$5,000,000
401(k)/457 assets managed	$7,000,000
Tax-exempt clients	225
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	1

Virginia Investment Counselors Inc. is an active equity, active fixed-income and balanced manager.
Its equity approach seeks low p/e stocks through sector rotation and market timing under Graham & Dodd principles. Its fixed-income approach combines interest rate anticipation and sector analysis. Options are used.
The asset mix Jan. 1 was 25% stocks, 58% bonds, 12% cash, 2% equity real estate, 1% mortgages and 2% mortgage-backed securities.
The firm follows 40 stocks closely and 400, generally; 50% of the research is generated internally.
Frederick V. Martin is chief investment officer; Henry V. Harris III is client contact.

Voyageur Asset Management
100 S. Fifth St., Suite 2200, Minneapolis, Minn. 55402; (612) 341-6728

Total assets managed	$1,500,000,000
Total discretionary	$1,460,000,000
Total tax-exempt assets	$425,000,000
Total discretionary tax-exempt	$285,000,000
Tax-exempt clients	10
Types of accounts managed	CFG
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	3

Voyageur Asset Management is an active equity, active fixed-income, balanced and short-term manager.
Its equity approach is to buy undervalued, high-quality growth stocks that tend to be larger cap companies than most growth managers hold.
Its fixed-income approach is top-down, total return. Sector analysis is used.
The asset mix Jan. 1 was 10% stocks, 65% bonds and 5% cash.
The firm follows 375 stocks closely; 50% of research is generated internally.
The parents are Allied Insurance and Marquette Bank Minneapolis.
Ken Dawkins is chief investment officer; Frank Jonnemaker is client contact.

W

Waddell & Reed Asset Management Co.
6300 Lamar, Shawnee Mission, Kan. 66202; (913) 236-1735

Total assets managed	$1,089,000,000
Total discretionary	$881,000,000
Total tax-exempt assets	$811,000,000
Total discretionary tax-exempt	$811,000,000
Tax-exempt clients	34
Types of accounts managed	CEFGJ
Minimum separate account	$3,000,000
No. of portfolio managers	14
Size of research staff	21

Waddell & Reed Asset Management Co. is an active domestic and international equity, active fixed-income, balanced and short-term manager.
Its equity approach uses secular allocation oriented to major market cycle changes. The degree of market participation is based on an analysis of price vs. intrinsic value relationships and the business cycle. Its fixed-income approach is to alter duration based on the outlook for interest rates within a duration range of one to 6.5 years. Options and financial futures are used.
The asset mix Jan. 1 was 60% stocks, 24% bonds and 16% cash.
The firm follows 200 stocks closely and 500, generally; 75% of the research is generated internally.
The parent is United Investors Management Co.
Henry J. Herrmann is chief investment officer; Jackson L. Allen Jr. is client contact.

Wagner & Hamil Inc.
410 17th St., Suite 840, Denver, Colo. 80202; (303) 892-6928

Total assets managed	$240,000,000
Total discretionary	$40,000,000
Total tax-exempt assets	$14,000,000
Total discretionary tax-exempt	$14,000,000
Tax-exempt clients	10
Types of accounts managed	CEFJ
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	1

Wagner & Hamil Inc. is an active equity, active fixed-income, balanced and short-term manager.
Its equity approach is long term-oriented, combining established growth and emerging growth stocks with a value bias. Earning predictability is critical. Graham & Dodd analysis is used.
In fixed-income, quality is the most important criterion, with a bias toward high-grade corporate, government and agencies of intermediate maturities.
The asset mix Jan. 1 was 50% equities, 40% bonds and 10% cash.
The firm follows 50 stocks closely and 150, generally; 75% of the research is generated internally.
Judith B. Wagner is chief investment officer; Carolyn Hamil Henderson is client contact.

Walnut Asset Management
1617 JFK Blvd., Suite 500, Philadelphia, Pa. 19103; (215) 981-0776

Total assets managed	$63,000,000
Total discretionary	$63,000,000
Total tax-exempt assets	$12,000,000
Total discretionary tax-exempt	$12,000,000
Tax-exempt clients	33
Types of accounts managed	CE
Minimum separate account	$5,000,000
No. of portfolio managers	3

Walnut Asset Management Inc. is an active equity and balanced manager.
Its value equity style concentrates in stocks with low p/e ratios (bottom 40%). Quantitative and qualitative standards are employed.
The asset mix Jan. 1 was 36% stocks, 33% bonds and 31% cash.
The firm follows 80 stocks closely and 175, generally; 50% of research is generated internally.
The parent is Rutherford Financial Corp.
Thom R. Brown is chief investment officer; George M. Treffeisen is client contact.

Warburg Investment Management International
780 Third Ave., New York, N.Y. 10017; (212) 751-8340

Total assets managed	$2,639,000,000
Total discretionary	$2,639,000,000
Total tax-exempt assets	$2,281,000,000
Total discretionary tax-exempt	$2,281,000,000
International equity assets	$990,000,000
International fixed-income	$1,291,000,000
Tax-exempt clients	31
Types of accounts managed	CEFG
Minimum separate account	$10,000,000
No. of portfolio managers	8

Warburg Investment Management International Ltd. is an active international/global equity, fixed-income, balanced and European regional equity man-

ager.

Its equity approach uses market timing/asset allocation. It combines top-down and bottom-up fundamental analysis with stocks analyzed against a number of criteria, including earnings growth management and product strength.

Its fixed-income approach focuses on interest rate and currency rate trend analysis, active currency and maturity management and high quality. Fixed-income futures are used.

The asset mix Jan. 1 was 43% stocks and 57% bonds.

The firm follows 600 stocks closely and 300 to 400 generally; 60% of the research is generated internally.

The parent is Mercury Asset Management Group PLC.

Robert P.B. Michaelson is chief investment officer; Steven W. Golann and James M. Donald are client contacts.

Warburg, Pincus Counsellors Inc.

466 Lexington Ave., New York, N.Y. 10017; (212) 878-0600

Total assets managed	$4,323,000,000
Total discretionary	$3,543,000,000
Total tax-exempt assets	$1,549,000,000
Total discretionary tax-exempt	$1,467,000,000
Tax-exempt clients	177
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	16
Size of research staff	8

Warburg, Pincus Counsellors Inc. is an active domestic and international equity and fixed-income, balanced and short-term manager.

Its equity approach focuses on growth stock investing. The firm is a bottom-up stock picker that evaluates companies from a business owner's point of view. Intensive fundamental in-house research is used to find financially strong, moderate-size companies with superior earnings prospects.

The firm uses bonds to satisfy income and asset mix requirements and to dampen portfolio volatility. Interest rate anticipation is used; intermediate maturities are emphasized.

The asset mix Jan. 1 was 57% stocks, 30% bonds and 13% cash.

The firm follows 150 stocks closely and 240, generally; 85% of the research is generated internally.

Andrew H. Massie is chief investment officer; Walter W. Shults is client contact.

Ward & Wissner Capital Management Inc.

99 Park Ave., 10th Floor, New York, N.Y. 10016; (212) 557-2077

Total assets managed	$376,000,000
Total discretionary	$376,000,000
Total tax-exempt assets	$347,000,000
Total discretionary tax-exempt	$347,000,000
Mortgage assets	$30,000,000
Mortgage-backed assets	$35,000,000
Tax-exempt clients	8
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	3

Ward & Wissner Capital Management Inc. is an active domestic and international fixed-income and short-term manager.

The firm structures bond portfolios to achieve targeted plan objectives, either nominal or real rates of return and/or minimum return in the appreciation potential.

Options and fixed-income futures are used.

All of the research is generated internally.

Leonard H. Wissner is chief investment officer and client contact.

Wardley Investment Services

5 E. 59th St., Suite 7000, New York, N.Y. 10022; (212) 415-0660

Total assets managed	$9,818,000,000
Total discretionary	$9,818,000,000
Total tax-exempt assets	$908,000,000
Total discretionary tax-exempt	$908,000,000
International equity assets	$90,000,000
International cash assets	$20,000,000
Tax-exempt clients	12
Types of accounts managed	CG
Minimum separate account	$10,000,000
No. of portfolio managers	66
Size of research staff	14

Wardley Investment Services is the investment management arm of the Hongkong and Shanghai Banking Corp. The firm is a global equity, fixed-income and cash manager, with special expertise in the smaller markets of Southeast Asia. Meninvest Inc., profiled separately, manages assets in addition to the data above on behalf of the parent company.

The parent company is Wardley Investment Services Ltd.

Stephen M. Swift is the chief investment officer; Deborah C. George is the client contact.

● The assets of Wardley Investment Services (Hong Kong) Ltd. are included in the figures above. The subsidiary manages $110 million in U.S. discretionary tax-exempt assets in active international/global equity and fixed-income accounts. It specializes in Southeast Asian equities. Portfolios are concentrated in countries, stocks and industries expected to grow as a result of the firm's economic outlook.

Wardley Investment Services (Hong Kong) Ltd.

Bank of America Tower, 12 Harcourt Road, 12th Floor, Hong Kong; 852-847-9600 or (212) 415-0660

See entry for WARDLEY INVESTMENT SERVICES.

David E. Ware & Associates

2300 N. Barrington Road, Suite 340, Hoffman Estates, Ill. 60195; (708) 490-9060

Total assets managed	$27,000,000
Total discretionary	$27,000,000
Total tax-exempt assets	$7,000,000
Total discretionary tax-exempt	$7,000,000
International equity assets	$400,000
Tax-exempt clients	19
Types of accounts managed	CF
Minimum separate account	$200,000
No. of portfolio managers	1
Size of research staff	2

David E. Ware & Associates is an active equity, active bond, balanced and short-term manager.

The firm uses portfolio optimization techniques to establish a level of market risk attributes, and then creates and maintains an optimum portfolio to consistently hold to that risk level. In equities, its uses closed-end funds.

The asset mix Jan. 1 was 60% stocks, 30% bonds, 5% cash and 5% royalty trusts.

The firm follows 500 stocks closely and 3,000, generally.

David E. Ware is chief investment officer and client contact.

Washington Square Capital

625 Marquette Ave., Suite 1400, Minneapolis, Minn. 55402; (612) 342-3736

Total assets managed	$10,720,000,000
Total discretionary assets	$10,720,000,000
Total tax-exempt assets	$2,880,000,000
Total discretionary tax-exempt	$2,880,000,000
Equity real estate assets	$40,000,000
Mortgage assets	$736,000,000
Dedicated/immunized assets	$1,191,000,000
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	22

Washington Square Capital, an active domestic and international fixed-income manager, seeks to maximize results through the purchase of issues considered relatively attractive to other fixed-income alternatives.

Options and fixed-income futures are used.

The asset mix Jan. 1 was 62% bonds, 6% cash, 2% equity real estate, 30% mortgages.

The parent is NWNL Cos.

Douglas Hedberg is chief investment officer; Stephen Dillenburg is client contact.

Wedge Capital Management

2920 One First Union Center, Charlotte, N.C. 28202-6002; (704) 334-6475

Total assets managed	$1,247,000,000
Total discretionary	$1,247,000,000
Total tax-exempt assets	$1,060,000,000
Total discretionary tax-exempt	$1,060,000,000
401(k)/457 assets managed	$75,000,000
Tax-exempt clients	145
Types of accounts managed	CEFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	2

Wedge Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach uses quantitative disciplines to evaluate a broad universe of stocks. Desired stocks will have improving earnings, good dividends and low p/e ratios. Its fixed-income approach uses quantitative disciplines to anticipate interest rate changes.

The asset mix Jan. 1 was 67% stocks, 14% bonds and 19% cash.

The firm follows 100 stocks closely and 100, generally; 80% of the research is generated internally.

Richard X. Hodde is chief investment officer; R. Michael James is client contact.

Weiss, Peck & Greer

1 New York Plaza, New York, N.Y. 10004; (212) 908-9500

Total assets managed	$7,497,000,000
Total discretionary	$7,497,000,000
Total tax-exempt assets	$4,581,000,000
Total discretionary tax-exempt	$4,581,000,000
Tax-exempt clients	105
Types of accounts managed	CEFGJ
Minimum separate account	$5,000,000
No. of portfolio managers	16
Size of research staff	9

Weiss, Peck & Greer is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Its equity approach is flexible, characterized by a combination of top-down and bottom-up processes, overweighting particularly attractive sectors. In stock selection, the firm is value-driven, seeking companies with consistent earnings growth or with prospects of fundamental change in structure or regulation in its industry.

Its fixed-income approach stresses high-quality portfolios and methodology that is neither indexation nor market timing. Management is systematic and based on holding a constant level of portfolio risk (duration), wherein market volatility makes a positive contribution to returns. Individual securities are value-ranked based on proprietary models.

Options and financial futures are used.

The firm follows 200 stocks closely and 500, generally; 80% of the research is generated internally.

Stephen H. Weiss is chief investment officer; Nelson Schaenen Jr. is client contact.

Wellington Management Co.

75 State St., Boston, Mass. 02109; (617) 951-5000

Total assets managed	$41,720,000,000
Total discretionary	$41,720,000,000
Total tax-exempt assets	$13,974,000,000
Discretionary tax-exempt	$13,974,000,000
Mortgage assets	$112,000,000
International equity assets	$342,000,000
International fixed-income	$105,000,000
International cash assets	$30,000,000
Tax-exempt clients	229
Types of accounts managed	CEFGJ
No. of portfolio managers	33
Size of research staff	46

Wellington Management Co. offers active management of domestic and international equity, fixed-income and balanced accounts, as well as real estate and short-term management.

The firm offers a range of domestic and international equity and fixed-income styles, with investment decisions based on intensive fundamental research.

For real estate, the firm invests in participating mortgages in established, high-quality, residential multifamily properties.

Options and financial futures are used.

The asset mix Jan. 1 was 70% stocks, 20% bonds, 9% cash and 1% mortgages.

The firm follows 600 stocks closely and 1,500, generally; 85% to 90% of the research is generated internally.

Robert W. Doran is chief investment officer; Dena G. Willmore is client contact.

Wells Fargo Nikko Investment Advisors

45 Fremont St., San Francisco, Calif. 94105; (415) 597-2700

Total assets managed	$78,791,000,000
Total discretionary	$78,791,000,000
Total tax-exempt assets	$73,868,000,000
Discretionary tax-exempt	$73,868,000,000
International equity assets	$4,075,000,000
International fixed-income	$139,000,000
International cash assets	$1,505,000,000
Equity indexed assets	$44,507,000,000
Fixed-income indexed assets	$7,061,000,000
Dedicated/immunized assets	$269,000,000
Mortgage-backed assets	$1,520,000,000
401(k)/457 assets managed	$3,151,000,000
Tax-exempt clients	322
Types of accounts managed	CEFGJ
Minimum separate account	$100,000,000
No. of portfolio managers	19
Size of research staff	5

Wells Fargo Nikko Investment Advisors is a passive domestic and international equity and fixed-income and short-term manager.

Its equity approach is to manage index funds to replicate the returns of various benchmarks worldwide. Tilted funds seek to add value by structured, quantitative emphasis on selected market attributes. In fixed-income, the firm offers modular index funds replicating the returns of major fixed-income sectors. Custom strategies are available.

The firm runs $2.019 billion in currency hedging and hedged domestic equity strategies; it also manages the underlying assets.

Options and financial futures are used.

The asset mix Jan. 1 was 65.77% stocks, 10.11% bonds, 22.06% cash and 2.06% mortgage-backed securities.

The firm is owned equally by Wells Fargo & Co. and Nikko Securities Ltd.

Patricia Dunn and Donald Laskin are chief investment officers; Michael Herman is client contact.

Wells Fargo Realty Advisors

595 Market St., 15th Floor, San Francisco, Calif. 94105-2824; (415) 396-6222

Total assets managed	$1,060,000,000
Total discretionary	$646,000,000
Total tax-exempt assets	$646,000,000
Total discretionary tax-exempt	$646,000,000
Equity real estate assets	$520,000,000
Mortgage assets	$1,000,000
401(k)/457 assets managed	$41,000,000
Tax-exempt clients	115
Types of accounts managed	CG
Minimum separate account	$100,000,000
No. of portfolio managers	2

Wells Fargo Realty Advisors, a real estate manager, seeks opportunities to create value through new property development and the expansion or renovation of existing properties.

The asset mix Jan. 1 was 80.4% equity real estate, 0.1% mortgages and 19.5% cash.

The parent is Wells Fargo Bank.

Doug Hayek is chief investment officer; J. Michael Johnson is client contact.

Welsh Money Management

263 Chapalita Drive, Encinitas, Calif. 92024; (619) 436-2456

Total assets managed	$7,000,000
Total discretionary	$7,000,000
Total tax-exempt assets	$6,000,000
Total discretionary tax-exempt	$6,000,000
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	40
Types of accounts managed	C
Minimum separate account	$100,000
No. of portfolio managers	1

Welsh Money Management, an active domestic and international equity manager, is a market timer using domestic, international and gold mutual funds. Its objective is to outperform the S&P 500 while being invested in funds only 35% of the time, thereby cutting market risk in half. When invested, the firm chooses no-load funds displaying greater relative strength than market averages.

All assets were in cash Jan. 1.

All research is generated internally.

E. James Welsh is chief investment officer and client contact.

Wertheim Schroder Investment Services Inc.

787 Seventh Ave., Equitable Center, New York, N.Y. 10019; (212) 492-6000

Total assets managed	$10,685,000,000
Total discretionary	$1,298,000,000
Total tax-exempt assets	$894,000,000
Total discretionary tax-exempt	$894,000,000
401(k)/457 assets managed	$49,000,000
Tax-exempt clients	29
Types of accounts managed	CFJ
Minimum separate account	$5,000,000
No. of portfolio managers	10
Size of research staff	26

Wertheim Schroder Investment Services Inc. is an active equity, active fixed-income, balanced and short-term manager.

In equities, the firm specializes in small-cap stocks. The decision-making emphasis is on fundamental research, seeking high-quality stocks selling at low relative price multiples with unrecognized future growth potential. In fixed-income, total return is emphasized, using high-quality securities; primary focus is on best relative values in the market sectors.

The asset mix Jan. 1 was 40% stocks, 46.5% bonds and 13.5% cash.

The firm follows 100 stocks closely and 100, generally; 80% of the research is generated internally.

The parent is Wertheim Schroder & Co. Inc.

E. William Smethurst Jr. is chief investment officer; Gary S. Klem is client contact.

West One Trust-West One Bank

101 S. Capitol Blvd., P.O. Box [illegible]28, Suite 905, Boise, Idaho 83707, (208) 383-7252

Total assets managed	$1,368,000,000
Total discretionary assets	$1,368,000,000
Total tax-exempt assets	$426,000,000
Total discretionary tax-exempt	$426,000,000
Tax-exempt clients	590
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	7
Size of research staff	1

West One Trust — West One Bank is an active and passive equity, active fixed-income, balanced and short-term manager.

Its equity approach uses a value orientation toward stock selection that originates with a top-down economic overview. It prefers companies with low financial leverage, expanding earnings, below-market p/e and low price/book. Its fixed-income approach uses interest rate trends and forecasts generated from a fundamental view to set portfolio durations. Sector analysis is used to identify vehicles and add incremental returns.

The asset mix Jan. 1 was 45% stocks and 55% bonds.

The bank follows 65 stocks closely and 350, generally.

The parent is West One Bancorp.

Douglas Blattmachr is chief investment officer; Michael Cusak is client contact.

Western Asset Management

117 E. Colorado Blvd., Sixth floor, Pasadena, Calif. 91105; (818) 584-4300

Total assets managed	$8,178,000,000
Total discretionary	$5,003,000,000
Total tax-exempt assets	$6,446,000,000
Total discretionary tax-exempt	$4,559,000,000
Mortgage-backed assets	$1,140,000,000
401(k)/457 assets managed	$374,000,000
Tax-exempt clients	38
Types of accounts managed	CEFGJ
Minimum separate account	$50,000,000
No. of portfolio managers	7
Size of research staff	3

Western Asset Management Co. is an active and passive fixed-income and short-term manager.

Its fixed-income approach adds value primarily by sector rotation (both among and within sectors) and by issue selection. Risk is controlled by carefully and explicitly uniting portfolio interest rate exposure. Options and fixed-income futures are used.

The asset mix Jan. 1 was 70% bonds, 5% cash and 25% mortgage-backed securities.

The firm generates 50% of its research internally.

The parent is Legg Mason Inc.

W. Curtis Livingston is chief investment officer; Randolph L. Kohn is client contact.

Westwood Management

885 Third Ave., 31st Floor, New York, N.Y. 10022-4802; (212) 688-2323

Total assets managed	$1,100,000,000
Total discretionary	$1,100,000,000
Total tax-exempt assets	$1,050,000,000
Total discretionary tax-exempt	$1,050,000,000
401(k)/457 assets managed	$15,000,000
Tax-exempt clients	36
Types of accounts managed	CEFG
Minimum separate equity account	$25,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	4
Size of research staff	1

Westwood Management Corp. is an active equity, active and passive fixed-income, balanced, tactical asset allocation and mutual fund manager.

Its equity approach is risk averse, utilizing a top-down/sector theme approach. Special attention is paid to p/e valuation, prospective earnings surprise and strict sell disciplines. Its fixed-income approach employs sector shifts driven by its long-term secular outlook as part of a "top-down" investment process. Shorter term probability-weighted one-year economic scenarios drive duration strategy and portfolio structure. Options and stock index futures are used.

The asset mix Jan. 1 was 80% stocks, 10%

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bonds and 10% cash.
The firm follows 150 stocks closely and 100, generally; 35% of the research is generated internally.
Susan M. Byrne is chief investment officer; David W. Jennings and Nurio M. Valdivia are client contacts.

WFG Investment Management Inc.
1331 H St. N.W., Washington, D.C. 20005; (202) 628-7457

Total assets managed	$28,000,000
Total discretionary	$20,000,000
Total tax-exempt assets	$16,000,000
Total discretionary tax-exempt	$16,000,000
Tax-exempt clients	8
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	2

WFG Investment Management Inc. is an active equity, active fixed-income, balanced and short-term manager.
Its equity approach is value-oriented; its fixed-income approach uses interest rate anticipation.
The asset mix Jan. 1 was 20% stocks, 70% bonds and 10% cash.
The firm follows 30 stocks closely and 70, generally; 80% of research is generated internally.
Carol Greenwald is chief investment officer and client contact.

Widmann, Siff & Co. Inc.
40 Morris Ave., Suite 120, Bryn Mawr, Pa. 19010; (215) 520-0500

Total assets managed	$333,000,000
Total discretionary	$333,000,000
Total tax-exempt assets	$176,000,000
Total discretionary tax-exempt	$176,000,000
401(k)/457 assets managed	$26,000,000
Tax-exempt clients	332
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	2

Widmann, Siff & Co. Inc. is an active equity, active fixed-income and balanced manager.
Its equity approach seeks stocks that should show a return exceeding that of the market. Resultant portfolios show a higher average growth rate with higher average yield. In fixed income, adjustments are made to portfolio maturities/duration based on anticipated significant changes in the interest rate structure.
The asset mix Jan. 1 was 70% stocks, 15% bonds and 15% cash.
The firm follows 60 stocks closely and 150, generally; 90% of the research is generated internally.
Ernest R. Widmann is chief investment officer; Jeffrey S. McCallum is client contact.

Wilkinson Boyd Asset Management Inc.
199 Elm St., New Canaan, Conn. 06897; (203) 972-0039

Total assets managed	$40,000,000
Total discretionary	$17,000,000
Total tax-exempt assets	$17,000,000
Total discretionary tax-exempt	$17,000,000
Tax-exempt clients	1
Types of accounts managed	F
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	8

Wilkinson Boyd Asset Management Inc., an active fixed-income manager, uses a short-duration strategy of U.S. Treasury issues enhanced with a small amount of call options on bond futures.
Options and fixed-income futures are used.
All assets were in bonds Jan. 1.
Frank M. Wilkinson is chief investment officer and client contact.

Willoughby Holin & Rentner
7455 N.W. 4th Street, Plantation, Fla. 33317; (305) 584-8800

Total assets managed	$164,000,000
Total discretionary	$164,000,000
Total tax-exempt assets	$128,000,000
Total discretionary tax-exempt	$128,000,000
Tax-exempt clients	166
Types of accounts managed	CF
Minimum separate account	$250,000
No. of portfolio managers	3

Willoughby Holin & Rentner Inc. is an active and passive equity, passive fixed-income and balanced manager.
Its equity approach uses growth and emerging growth stocks, trying to identify trends, then buying stocks likely to benefit from those trends when the securities are depressed. Its fixed-income approach uses interest rate anticipation.
The asset mix Jan. 1 was 50% stocks and 50% cash.
The firm follows 50 stocks closely and 25, generally; 20% of the research is generated internally.
Michael A. Harris is chief investment officer; James D. Rentner is client contact.

Wilmington Capital Management Inc.
1 Rodney Square, Suite 100, Wilmington, Del. 19801; (302) 656-8241

Total assets managed	$988,000,000
Total discretionary	$988,000,000
Total tax-exempt assets	$903,000,000
Total discretionary tax-exempt	$903,000,000
401(k)/457 assets managed	$144,000,000
Tax-exempt clients	22
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	2

Wilmington Capital Management Inc., an active equity manager, combines Graham & Dodd analysis and low p/e stocks. It seeks to determine value through fundamental analysis; disparities between value and price create investment opportunities.
The asset mix Jan. 1 was 84% stocks, 4% bonds and 12% cash.
The parent is Wilmington Trust Co.
Daniel F. Mahoney is chief investment officer; James W. Graves is client contact.

Wilmington Trust Co.
Rodney Square North, Wilmington, Del. 19890; (302) 651-8518

Total assets managed	$102,517,000,000
Total discretionary	$5,065,000,000
Total tax-exempt assets	$1,137,000,000
Total discretionary tax-exempt	$1,137,000,000
International equity assets	$10,000,000
401(k)/457 assets managed	$12,000,000
Tax-exempt clients	79
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	15
Size of research staff	8

Wilmington Trust Co. is an active domestic and international equity, active fixed-income, balanced, short-term and options manager.
Its equity approach is disciplined, systematic, consistent and value-oriented, using low p/e stocks and Graham & Dodd analysis. It offers three approaches: select value, yield and optioned equity. In fixed-income, it uses a mathematical investment process that reacts to and participates in price trends. Options are used.
In addition to the assets listed above, $150 million in total discretionary assets are assigned to external managers and $37 million in discretionary tax-exempt assets are assigned to external managers.
The asset mix Jan. 1 was 32% stocks, 14% bonds and 54% cash.
The firm follows 125 stocks closely and 300, generally; 75% of research is generated internally.
Peter J. Succoso is chief investment officer; Jeffrey Stroble is client contact.

Wilshire Asset Management
1299 Ocean Ave., Santa Monica, Calif. 90401; (213) 451-3051

Total assets managed	$3,792,000,000
Total discretionary	$2,852,000,000
Total tax-exempt assets	$2,852,000,000
Total discretionary tax-exempt	$2,852,000,000
Equity indexed assets	$2,852,000,000
Tax-exempt clients	12
Minimum separate account	$6,000,000
No.of portfolio managers	2
Size of research staff	4

Wilshire Asset Management, a passive equity manager, manages index portfolios and style portfolios focusing on growth, emerging growth and value using quantitative models.
All assets were in stocks Jan. 1.
The firm is a division of Wilshire Associates.
Thomas D. Stevens is chief investment officer. Michael J. Napoli Jr. is client contact.

Wilson, Kemp & Associates
400 Renaissance Center, Suite 2155, Detroit, Mich. 48243; (313) 259-6210

Total assets managed	$425,000,000
Total discretionary	$425,000,000
Total tax-exempt assets	$275,000,000
Total discretionary tax-exempt	$275,000,000
Tax-exempt clients	85
Types of accounts managed	CEFG
Minimum separate account	$300,000
No. of portfolio managers	2

Wilson, Kemp & Associates is an active equity, active fixed-income and balanced manager.
Its equity approach employs fundamental analysis combining growth, emerging growth and low p/e stocks with Graham & Dodd analysis.
Its primary fixed-income approach is interest rate anticipation with an emphasis on high-quality corporate and government sector issues.
The firm follows 300 stocks generally.
The parent is Manufacturers National Corp.
Thomas A. Wilson is chief investment officer; Mark E. Van Faussen is client contact.

Windham Capital Management
17 State St., New York, N.Y. 10004; (212) 487-3568

Total assets managed	$550,000,000
Total discretionary	$550,000,000
Total tax-exempt assets	$500,000,000
Total discretionary tax-exempt	$500,000,000
Tax-exempt clients	7
Types of accounts managed	CF
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	3

Windham Capital Management is an active equity, balanced, short-term, tactical asset allocation and currency manager.
Its equity approach is value-oriented and quantitative. For fixed-income, interest rate anticipation is used. Options and financial futures are used.
The asset mix Jan. 1 was 40% equities, 30% bonds, 10% cash and 20% currency management.
The firm follows 100 stocks closely and 500, generally; 75% of the research is generated internally.
Neil M. McCarthy and Mark Kritzman are chief investment officers.

Windsor Realty Advisors
120 W. Grand, Escondido, Calif. 92025; (619) 746-2411

Total assets managed	$150,000,000
Total discretionary	$150,000,000
Total tax-exempt assets	$101,000,000
Total discretionary tax-exempt	$101,000,000
Equity real estate assets	$101,000,000
Types of accounts managed	CG
Minimum separate account	$10,000,000

Windsor Realty Advisors, a real estate manager, acquires high-grade mobile home communities on an all-cash basis and adds value to these properties.
Christopher J. Coseo is chief investment officer.

Winrich Capital Management
23702 Birtcher Drive, Lake Forest, Calif. 92630; (714) 380-0200

Total assets managed	$220,000,000
Total discretionary	$220,000,000
Total tax-exempt assets	$140,000,000
Total discretionary tax-exempt	$140,000,000
International equity assets	$13,000,000
International fixed-income	$11,000,000
401(k)/457 assets managed	$2,000,000
Tax-exempt clients	29
Types of accounts managed	CFJ
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	3

Winrich Capital Management Inc. is an active equity, active fixed-income, short-term and balanced manager.
Its equity approach uses bottom-up security selection based on experienced judgment and quantitative disciplines. Moderate foreign exposure is used as part of overall diversification.
Its fixed-income approach emphasizes quality and low volatility, adding value through yield curve, sector and risk analysis. U.S. government and corporate securities are used in positioning duration.
The asset mix Jan. 1 was 42% stocks, 50% bonds and 8% cash.
The firm follows 50 stocks closely and 200, generally; 80% of research is generated internally.
Darrell J. Winrich is chief investment officer; Paul R. Black is client contact.

William D. Witter Inc.
153 E. 53rd St., New York, N.Y. 10022; (212) 753-7878

Total assets managed	$437,000,000
Total discretionary	$437,000,000
Total tax-exempt assets	$224,000,000
Total discretionary tax-exempt	$224,000,000
Tax-exempt clients	49
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	1

William D. Witter Inc. is an active equity, active fixed-income and balanced manager.
The equity philosophy emphasizes growth with a value discipline. Portfolios are constructed on a bottom-up, risk/reward basis, seeking a better than market investment return. Small-cap, low p/e and growth stocks are targeted.
The asset mix Jan. 1 was 75% stocks, 12% bonds and 13% cash.
The firm follows 75 stocks closely and 150, generally; 50% of the research is generated internally.
William D. Witter is chief investment officer and client contact.

Wolf, Webb, Burk & Campbell Inc.
260 S. Broad St., Suite 901, Philadelphia, Pa. 19102; (215) 735-5910

Total assets managed	$1,604,000,000
Total discretionary	$1,604,000,000
Total tax-exempt assets	$1,604,000,000
Total discretionary tax-exempt	$1,604,000,000
Tax-exempt clients	66
Types of accounts managed	CFGJ
Minimum separate account	$10,000,000
No. of portfolio managers	7

Wolf, Webb, Burk & Campbell Inc. is an active equity and fixed-income, balanced, tactical asset allocation and short-term manager.
Its equity approach specializes in the identification of undervalued companies before they become fully recognized in the marketplace.
Its fixed-income approach manages portfolios to take maximum advantage of the trends that evolve over the course of the interest rate cycle.
The asset mix Jan. 1 was 41% stocks, 26% bonds and 33% cash.
The firm follows 150 stocks closely and 1,000, generally; 75% of the research is generated internally.

Key to abbreviations
C: Corporate
E: Educational endowment
F: Private foundation
G: State/local gov't
J: Jointly trusteed
U: Unions (Canadians only)

H. Jerry Wolf is chief investment officer; William J. Campbell is client contact.

Denis Wong & Associates
1314 S. King St., Suite 1057, Honolulu, Hawaii 96814; (808) 537-9931

Total assets managed	$100,000,000
Total discretionary	$100,000,000
Total tax-exempt assets	$100,000,000
Total discretionary tax-exempt	$100,000,000
Mortgage-backed assets	$2,000,000
Tax-exempt clients	38
Types of accounts managed	CEFGJ
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	3

Denis Wong & Associates Inc. is an active equity, active fixed-income, balanced and short-term manager.
Its quantitative equity approach focuses on value first, earnings growth second, and technical timeliness third with a preference for low beta. Its fixed-income approach is based on interest rate anticipation, constructing short- or long-maturity portfolios using only government and investment-grade bonds. Stock index futures are used.
The asset mix Jan. 1 was 65% stocks, 31% bonds, 2% cash and 2% mortgage-backed securities.
The firm follows 170 stocks closely and 1,700, generally; 30% of the research is generated internally.
Denis Y. Wong is chief investment officer; Daniel N. Jones is client contact.

Wood, Struthers & Winthrop
140 Broadway, New York, N.Y. 10005; (212) 504-4000

Total assets managed	$1,151,000,000
Total discretionary	$907,000,000
Total tax-exempt assets	$375,000,000
Total discretionary tax-exempt	$316,000,000
401(k)/457 assets managed	$44,000,000
Tax-exempt clients	76
Types of accounts managed	CEF
Minimum separate account	$3,000,000
No. of portfolio managers	6
Size of research staff	3

Wood, Struthers & Winthrop is an active equity, active fixed-income and balanced manager.
Its equity approach is based on fundamental research screened within the context of quantitative valuation techniques. Holdings are concentrated by sectors, emphasizing industry leaders with an identifiable earnings growth pattern. In fixed-income, it focuses on maturity risk to ensure preservation of capital and a real rate of return over an interest rate cycle. Fundamental research is used. Options are used.
The asset mix Jan. 1 was 44% stocks, 48% bonds and 8% cash.
The firm follows 40 to 70 stocks closely and 350, generally; 20% of the research is generated internally.
The parents are Donaldson, Lufkin & Jenrette and Equitable Life.
James A. Engle is chief investment officer; Martin Jaffe is client contact.

Woodmont Realty Advisors
1050 Ralston Ave., Belmont, Calif. 94002; (415) 592-3960

Total assets managed	$500,000,000
Total discretionary	$400,000,000
Total tax-exempt assets	$200,000,000
Total discretionary tax-exempt	$200,000,000
Equity real estate assets	$200,000,000
Tax-exempt clients	3
Types of accounts managed	EG
Minimum separate account	$10,000,000
No. of portfolio managers	3

Woodmont Realty Advisors, a real estate manager, provides acquisition, disposition and asset management, concentrating on West Coast fully leased office, industrial, R&D, warehouse and apartment properties.
All assets were in equity real estate Jan. 1.
Howard Friedman is chief investment officer and client contact.

Worldinvest Ltd.
56 Russell Square, London, U.K. WC1B 4HP; 71-637-3322

Total assets managed	$3,401,000,000
Total discretionary	$3,401,000,000
Total tax-exempt assets	$2,295,000,000
Total discretionary tax-exempt	$2,295,000,000
International equity assets	$542,000,000
International fixed-income	$1,718,000,000
International cash assets	$35,000,000
Tax-exempt clients	38
Types of accounts managed	CEFG
Minimum separate account	$15,000,000
No. of portfolio managers	14
Size of research staff	6

Worldinvest Ltd. is an active international/global equity and fixed-income manager.
Its equity and fixed-income approaches are both top-down, based on economic analysis. It is willing to take significant positions vs. market indexes.
The asset mix Jan. 1 was 24% stocks, 75% bonds and 1% cash.
The firm follows 200 stocks closely and 1,000, generally; 25% of the research is generated internally.
The parent is Worldinvest Holdings Ltd.
Keith Brown is chief investment officer; Susan Leader is client contact.

Wright Investors' Service
1000 Lafayette Blvd., Bridgeport, Conn. 06604; (203) 330-5000

Total assets managed	$3,367,000,000
Total discretionary	$3,367,000,000
Total tax-exempt assets	$2,915,000,000
Total discretionary tax-exempt	$2,915,000,000
International equity assets	$42,000,000
Dedicated/immunized assets	$729,000,000
Tax-exempt clients	105
Types of accounts managed	CEFGJ
Minimum separate equity account	$5,000,000
Minimum separate bond account	$2,000,000
No. of portfolio managers	8
Size of research staff	22

Wright Investors' Service is an active and passive equity and fixed-income, balanced, active international equity, short-term and tactical asset allocation manager.
Its equity styles include small- and large-cap fiduciary index, large-cap core, value growth, small cap, quality international and international country-specific indexes. Its fixed-income styles include money market, short-term bond and total return.
The asset mix Jan. 1 was 35% stocks, 56% bonds and 9% cash.
The firm follows 400 stocks closely and 5,000, generally; all research is generated internally.
The parent is Winthrop Corp.
Judith R. Corchard is chief investment officer; Albert L. Meric Jr. is client contact.

Y

Yamaichi International Capital Management Co.
1-14-8 Ningyo-cho, Nihonbashi, Chuo-ku, Tokyo 103, Japan; 03-3660-6143

Total assets managed	$13,449,000,000
Total discretionary	$7,742,000,000
Total tax-exempt assets	$228,000,000
Total discretionary tax-exempt	$228,000,000
International equity assets	$186,000,000
Equity indexed assets	$42,000,000
Tax-exempt clients	5
Types of accounts managed	C
Minimum separate account	$1,000,000
No. of portfolio managers	47
Size of research staff	5

Yamaichi International Capital Management Co. Ltd. is an active and passive domestic and international equity manager.
Its equity approach is value-oriented and quantitatively driven, seeking market inefficiencies.
All assets were in stocks Jan. 1.
The firm follows 2,000 stocks closely and 1,200, generally; 60% of the research is generated internally.
Kiyotoshi Aiba is chief investment officer; Toshiyuki Kanaya is client contact.

The Yarmouth Group Inc.
10 E. 50th St., New York, N.Y. 10022; (212) 355-4810

Total assets managed	$6,250,000,000
Total discretionary	$2,550,000,000
Total tax-exempt assets	$3,400,000,000
Total discretionary tax-exempt	$2,550,000,000
Equity real estate assets	$2,550,000,000
Tax-exempt clients	21
Types of accounts managed	CEFGJ
Minimum separate account	$100,000,000
No. of portfolio managers	15
Size of research staff	10

The Yarmouth Group, a real estate manager, stresses investments in fundamentally strong office buildings, regional malls and modern industrial properties. Generally, properties are in markets with substantial economic growth.
All assets were in equity real estate Jan. 1.
Christopher D. Budden is chief investment officer; David R. Hodes is client contact.

Yasuda Bank & Trust Co. (USA)
1 World Trade Center, Suite 8833, New York, N.Y. 10048; (212) 432-3620

Total assets managed	$46,900,000,000
Total tax-exempt assets	$200,000
Total discretionary tax-exempt	$200,000
Tax-exempt clients	1
Types of accounts managed	C
Minimum separate account	$5,000,000

Yasuda Bank & Trust Co. (USA) is an international/global active and passive equity, active fixed-income and balanced manager.
Its equity approach supplements a bottom-up research style with a multifactor approach to construct Japanese equity portfolios expected to outperform the market with lower associated risk.
All assets were in cash Jan. 1.
The firm follows 150 stocks closely and 300, generally; 25% of the research is generated internally.
The parent is Yasuda Trust & Banking Co. Ltd.
Marc B. Ira is chief investment officer; Scott Jason is client contact.

Yeager, Wood & Marshall
630 Fifth Ave., New York, N.Y. 10111; (212) 765-5350

Alphabetical listing of firms with tax-exempt rankings

Abbott Capital 416
Abel/Noser 615
Acorn Asset 566
Addison Capital 836
Advanced Investment 204
Aetna Life 5
AFA Financial 762
AFL-CIO Housing/Bldg. 473
AIG Global Investors 705
AIM Capital 639
Albion Mgmt. 892
Aldrich, Eastman & Waltch 116
Fred Alger 292
Allbritton Capital 668
Allegiance Capital 881
Alliance Capital 13
Allstate Life 119
Alpha Source 587
Am Cal Advisors 569
Amalgamated Bank/N.Y. 228
Amalgamated Trust 462
AMB Institutional Realty 581
Ambs Investment 624
American Agricultural 848
American Asset 522
American Capital Mgmt. 285
American Fund Advisors 835
American Income Plus 721
American Nat'l/Chattanooga 418
Amerindo 385
Ameritas 425
Ameritrust 75
Ameritrust Texas 266
Amervest 474
Amoskeag Bank 600
AMR Investment 352
AmSouth Bank 202
ANB Investment 45
Anchor Capital 544
Anhalt/O'Connell 377
Aon Advisors 268
Argus Investors' 337
Argus Investment 621
Ariel Capital 347
Ariston Capital 876
Armstrong Shaw 678
Arnhold & S. Bleichroeder 396
Ashland 356
Atalanta/Sosnoff 284
Atlanta Capital 255
APAM 430
Austin & Calvert 548
Avatar Associates 220

Total assets managed $500,000,000
Total discretionary $500,000,000
Total tax-exempt assets $400,000,000
Total discretionary tax-exempt .. $400,000,000
Tax-exempt clients 15
Types of accounts managed ..... CEF
Minimum separate account $10,000,000
No. of portfolio managers 3

Yeager, Wood & Marshall Inc., an active equity manager, invests solely in growth company stocks. Portfolio companies dominate their relevant markets and enjoy recurring revenue, thus ensuring sustainability of superior growth rates.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm follows 30 stocks closely and 50, generally; 85% of the research is generated internally.

George M. Yeager is client contact.

Z

Zevenbergen Capital Inc.
1200 Fifth Ave., Suite 1505, Seattle, Wash. 98101; (206) 682-8469

Total assets managed $49,000,000
Total discretionary $49,000,000
Total tax-exempt assets $30,000,000
Total discretionary tax-exempt .. $30,000,000
401(k)/457 assets managed $200,000
Tax-exempt clients 8
Types of accounts managed ..... CFG
Minimum separate account $1,000,000
No. of portfolio managers 2

Zevenbergen Capital Inc., an active equity manager, bases its equity approach on the belief that earnings drive stock prices and quality protects. Portfolios are constructed with companies showing above-average earnings growth prospects and strong financials.

The asset mix Jan. 1 was 99% stocks and 10% cash.

The firm follows 100 stocks closely and 300, generally; 40% of the research is generated internally.

Nancy A. Zevenbergen is chief investment officer and client contact.

Axe-Core 338
Axe-Houghton 468
J.H. Ayres 186
Back Bay Advisors 308
Julius Baer 369
Baillie Gifford Overseas 799
Robert W. Baird 510
Balch, Hardy, Scheinman 633
Balcor 221
BancOklahoma Trust 236
Bane, Barham 794
Bank IV 491
Bank of Ireland 702
Bank of New York 44
Bank of the West 753
Bank of Tokyo Trust 479
Bank One Indianapolis 114
Bank South 529
Bankers Trust 1
Bankers Trust/Des Moines 756
Baring America 301
Baring Int'l 128
Weaver C. Barksdale 360
Barnett Banks Trust 249
Baron Capital 843
Barrow, Hanley 64
Batterymarch Financial 136
Batterymarch: Agrivest 659
Baxter Capital 558
BEA Associates 71
Beacon Capital 329
Bear Stearns 126
P.E. Becker 539
Becker Van Etten 710
Beekman Capital 628
Bell Capital 656
Bennett & Kahnweiler 394
Berents Capital 807
Berg Capital 779
Berger Associates 854
Sanford C. Bernstein 50
Bessemer Trust 348
Beutel, Goodman Capital 427
Beutel, Goodman Int'l 406
Birtcher Realty 596
Bishop Trust 686
George D. Bjurman 445
Blackstone Financial 629
William Blair 318
BMI Capital 559
Boatmen's Trust 35
Boston Co. 25
Boston Int'l 299
Boston Overseas 432
Boston Security 875
Bounty 725
Bowen, Hanes 395
Boylston Capital 165
Boys, Arnold 634
Bradford Investment 711
Brandywine Asset 316
Stacey Braun Associates 238
Breau Capital 640
Daniel Breen 269
Bridgewater Asset 508
Brinson Partners 40
Brouwer & Janachowski 695
Alex. Brown/Kleinwort 133
C.H. Brown 728
Brown Brothers Harriman 98
Brundage, Story & Rose 289
BTR Capital 743
Buffalo Capital 802
Burgess Capital 570
Burnham 503
Burridge Group 553
BZW Investment 609
C&S Investment 231
Cabot Partners 344
Cadence Capital 527
Cadinha 542
Calcasieu Marine 726
Cambiar Investors 475
Campbell, Cowperthwait 674
Campbell, Reed 549
Capital Consultants 426
Capital Growth 346
Capital Guardian Trust 20
Capital Investment Advisors 780
Capital Investment Services 436
Capital Research 46
Capital Strategy 808
Capitalcorp Asset 703
Cartwright & Goodwin 809
Cashen Investment 882
Cashman, Farrell 189
CB Commercial Realty 373
Cedar Hill Associates 648
Central Bank Denver 810
Central Trust 407
Certus Financial 150
Chancellor Capital 36
Charles River 573
Chase Investment 588
Chase Investors 23
Cheswick Investment 787
Chicago Asset 354
Chicago Corp. 271
Chicago Title & Trust 246
Chrysalis Investments 915
Churchill 660
CIC Asset 736
CIGNA Investments 10
CIMG 709
Citibank Investment 361
City Capital Counseling 744
Clean Yield Asset 909
CMB Investment Counselors 383
Cohen, Davis 811
Cohen & Steers 604
Collins Associates *
Colorado Capital 408
Columbia 100
Columbus Bank 636
Columbus Circle 178
Commerce Bank 305
Common Fund *
Composite Research 492
Computime 830
Compu-Val 605
Concord Capital 247
Confederation Life 185
Connecticut Investment 871
Connecticut Mutual 159
Connecticut Nat'l Bank 216
Connors Investor Services 737
Consistent Asset 303
Constitution Capital 158
Continental Assurance 81
Continental Capital 326
Conus & Nicholson 754
Cook Inlet Investment 670
Cooke & Bieler 179
Copley Real Estate 56
Corbyn Associates 675
Cornell Capital 868
Cornerstone Asset 812
Corporate Property 168
County NatWest 257
Cowen Asset 481
Crabbe Huson 443
Cramer Rosenthal 622
Crawford Investment 556
Credit Suisse Asset 654
Crestar Bank 175
Criterion Investment 69
Cseh Int'l 904
CSI Asset 232
Cullen Fortier 768
Cumberland Advisors 722
John M. Cunningham 858
Martin Currie 585
Cutler 433
Cutugno 613
C&S/Sovran 88
Daiwa Int'l 417
Dalton, Greiner 211
Darien Capital *
John Stewart Darrell 788
Davenport Co./Va. 700
Davidson, Garrard 804
Davidson Capital 763
Davis, Weaver 590
Davis Hamilton 545
Dawes Investment 729
Dawson-Samberg 696
Dean Investment 176
Dearden, Maguire 482
Delafield Asset 618
Delaware Investment 29
Delta Financial 712
Denver Investment 130
Deposit Guaranty 451
Devon Institutional 818
Dewey Square 151
Dillon, Read 550
Dimensional Fund 120
Discount Corp. 129
DJ Investment 757
Dodge & Cox 83
Dollins Symons 899
Dominion Trust 412
Carl Domino 574
Dorsey 813
Dreman Value 171
Dreyfus 240
Dreyfus Realty 392
Duff & Phelps 54
Duncan-Hurst 652
Dunedin Fund 501
D.A. Management 683
Eads & Heald 883
Eagle Asset 152
Eagle Capital 840
Eaton, Vance 294
Edgewood 784
Emerging Markets 528
EMG Advisors 655
Emprise Bank 769
Roger Engemann 477
Equitable Agri-Business 363
Equitable Capital 15
Equitable Real Estate 24
Equity Investment 841
ERIAC 770
Estabrook Capital 402
EverGreen Capital 864
Ewing Capital 872
Executive Investment 713
Federated Investment 336
Fenimore Asset 849
Ferguson Investment 906
Ferguson Wellman 437
FFCA 532
Fidelity Investments 9
Fiduciary Capital 456
Fiduciary Counsel 745
Fiduciary Mgmt. 317
Fiduciary Trust Int'l 94
Financial Aims 676
Financial Counselors 364
Financial 645
Fine Capital 828
First Alabama 399
First Asset 124
First Austin 910
First Coast 610
First Commerce 438
First Fidelity 107
First Interstate/Ariz. 457
First Interstate/Calif. 148
First Interstate/Ore. 287
First Interstate/Wash. 140
First Investment 265
First Kentucky Trust 135
First Manhattan 188
First Midwest Asset 524
First Nat'l/Md. 320
First Nat'l/Omaha 349
First Nat'l/Gainesville 661
First Nat'l/Amarillo 562
First Nat'l/Rockford 662
First NH Investment 626
First Pacific 222
First Quadrant 252
First Reserve 463
1st Source Bank 547
First Wachovia 87
First Wisconsin Asset 155
First Wisconsin Trust 543
FirsTier Bank, Lincoln 502
Fischer Francis 38
Fisher Investments 480
Fleet/Norstar 89
Flippin, Bruce 530
Richard Fontaine 554
Forest Investment 755
Forstmann-Leff 164
Fox Asset 534
Foxhall Investment 593
Franklin Advisers 59
Franklin Asset 381
Franklin Portfolio 141
Fraser Mgmt. 825
Freedom Capital 458
Froley, Revy 428
Frontier Capital 332
Furgueson Capital 829
Gabelli-O'Connor 599
Galleon Capital 884
GAMCO Investors 153
Gardner & Preston Moss 224
Garrett Realty 521
Gateway Investment 630
GE Investments 14
Geewax, Terker 187
General American Investors 411
General American Life 262
Geneva Capital 751
GeoCapital 314
Geometry Asset 684
GeoVest Advisors 859
GIM Global 733
Gintel Equity 687
Glenmede Trust 115
Glickenhaus 309
Global Asset 679
Global Fixed Income 225
Globe Finlay 278
Golder, Thoma 526
Goldman Sachs Asset 127
J.C. Goodgal 900
Gradison Investment 589
Granahan Investment 771
Grantham, Mayo, v. Otterloo 85
R.W. Graybill 766
Great-West Life 72
David J. Greene 334
Greenleaf Capital 580
Greenwich Asset 772
Greenwood Capital 560
Guaranty Trust/Mo. 790
Gulf Investment 495
GW Capital 814
G.T. Capital 444
Hagler, Mastrovita 254
W.A. Haker 837
Hallmark Capital 586
Hambrecht & Quist 734
Hamilton, Allen 311
Hamilton Mgmt. 844
John Hancock 22
Hanson Investment 324
Harbor Capital 321
Harris Associates 280
Harris Investment 61
Hartford Life 84
J.M. Hartwell 536
Haven Capital 525
Hawaiian Trust 239
Hawthorne Associates 389
HD Int'l 359
Heartland Capital 499
Heilweil Hollander Jacobs 791
Heitman Advisory 96
Hellman, Jordan 276
Henderson Administration 740
Heritage Investors 690
Hibernia Nat'l Bank 215
Hill Samuel/Investment 341
Hilliard Lyons 419
M.D. Hirsch 575
Hodges Capital 831
Hoisington Investment 274
Holt-Smith 877
Horsley Keogh 420
Hotchkis & Wiley 134
Hourglass Capital 649
Howard & McInnes 917
Howe & Rusling 627
Huntington Trust 388
Hutson 518
IAA Trust 653
ICH Capital 315
ICM Asset 697
IDC Portfolio 723
IDS Equity/Fixed-Income 123
IDS Financial 865
IDS Growth Spectrum 567
IDS Int'l 391
IDS Research Core/Agg. 832
IDS Trust 172
Income Research 512
Independence Investment 118
Independence One 386
Indiana Investment 209
Wm. A. Inskeep 860
Institutional Capital 263
Institutional Portfolio 706
INTECH 447
Interfid Capital 701
Interinvest 719
Inverness Counsel 500
INVESCO MIM 37
INVESCO MIM Int'l 496
Investment Advisers 77
Investment Advisors 414
Investment Counsel 455
Investment Counselors 594
Investment Counselors/Md. 173
Investment Research 404
Investors Research Co. 893
Investors Research Corp. 256
Ivory & Sime Int'l 623
Jacobs Levy Equity 671
James Investment 471
James River 793
Jamison, Eaton 598
Jennison Associates 21
Jenswold, King 563
JMB Institutional Realty 57
JMC Capital 478
Johnson Investment 409
Jones Lang Wootton 304
Jundt Associates 219
Jurika & Voyles 677
Justin Asset 781
Kahn Brothers 578
Daniel S. Kampel 366
Kanawha Capital 764
Kankaku Scudder 911
Kanne, Paris 727

* manager of managers, not ranked

Karpus Investment	855
Karsten Realty	319
KAS Investment	901
Keeley Asset	856
Kemper Asset	177
Kemper Financial	80
Kempner Capital	614
Kennedy Associates	156
Kenwood Group	867
Kidder Peabody	429
Luther King	149
Kirr, Marbach	485
Kleinwort Benson Int'l	513
Koll Realty	229
KR Capital	365
Kunath Karren	730
Laidlaw Holdings	866
Alan B. Lancz	885
LaSalle Advisors	122
LaSalle Nat'l	210
Latimer & Buck	245
C.J. Lawrence	672
WR Lazard	217
Lazard Freres	43
R.M. Leary	826
Leavy Investment	421
Lee, Robinson	327
Lee Asset	894
Legg Mason	631
Lehigh Valley Bank	773
Lehman Ark	42
Lehndorff & Babson	312
Leonard Mgmt. Group	873
Leshner Financial	647
John A. Levin	368
Lexington	355
Leylegian Investment	469
Liberty Nat'l Bank	275
Lieber	357
Lincoln Capital	26
Lincoln Nat'l	53
Lipman, Carasso	731
Liquidity Fund	746
Llama Asset	735
Lombard Odier Int'l	466
London Investment	641
London & Bishopsgate Int'l	747
Longfellow Investment	616
Loomis Sayles	27
Lord, Abbett	195
Lowe, Brockenbrough	154
LVM Capital	720
Lynch & Mayer	279
M&I Investment	212
MacKay-Shields	101
Mackenzie Investment	597
Madison Investment	476
Magten Asset	489
Manning & Napier	167
Man. Hanover Trust	197
Man. Nat'l/Detroit	76
Manulife Financial	142
Marathon, London	714
Marathon Asset	663
Marinvest	351
Markston Investment	470
Marlborough Capital	767
Marshall Plan	765
Marshall & Sullivan	608
Martingale Asset	571
Marvin & Palmer	459
Mass. Financial	208
Mass. Mutual	32
Matrix Capital	375
Matuschka	685
McBryan Malone & Russell	732
McCowan	353
McCullough Andrews	358
McGlinn Capital	206
C.S. McKee	261
McMillion Capital	823
McMorgan	65
R. Meeder	446
Mellon Bond	18
Mellon Capital	8
Mellon Equity	137
Mellon/McMahan	306
L.J. Melody	328
Mendel Money	878
Mercantile Nat'l/Ind.	698
Mercantile-Safe	147
Merchants Bank	635
Merchants Capital	272
Merchants Nat'l	657
Merganser Capital	191
Meridian Capital	795
Meridian Investment	242
Merrill Lynch Asset	41
Merus Capital	335
Mesirow Asset	601
Metric Institutional	486
Metropolitan Life	3
MH & Associates	819
MIG Realty	413
Miller, Anderson	19
MIMLIC Asset	642
Minton Investment	393
Mississippi Valley	125
Mitchell Capital	800
Mitchell Group	895
Mitchell Hutchins	58
Montag & Caldwell	387
Montgomery Asset	632
MONY	73
Moran Asset	555
J.P. Morgan	7
Morgan Grenfell Capital	295
Morgan Grenfell Investment	200
Morgan Stanley Asset	28
Morgan Stanley/Chicago	331
Morley Capital	104
Morse, Williams	715
Mosa Capital	905
Mt. Auburn	758
Mount Lucas	517
MPT Associates	290
MSR Advisors	801
MTH Asset	694
Munder Capital	207
Murray Johnstone	509
Mutual Benefit Life	93
Mutual of America	102
Nakagama & Wallace	914
Narragansett Capital	591
Nat'l Bank of Commerce	607
Nat'l City Bank	166
Nat'l Investment Services	91
Nationwide Life Insurance	82
NBD Bank	66
NCM Capital	370
NCNB	51
Nelson Benson Zellmer	540
Nelson Capital	724
Neuberger & Berman	63
New Generation	912
New York Life	39
Newbold's Asset	110
Newgate Mgmt.	820
Newport Pacific	902
NewSouth Capital	423
NFJ Investment Group	557
Nicholas	490
Nicholas-Applegate	213
Nicholson Group	907
Nikko Capital (USA)	454
NM Capital	606
Nomura Capital	183
North American Capital	903
Northern Capital	296
Northern Trust	12
Northwest Quadrant	803
NWQ	258
Oak Hall	691
Oak Ridge	896
Oakwood Counselors	845
Oechsle Int'l	198
OFFITBANK	333
Old Kent Bank	145
Olympic Capital	223
One Federal Asset	267
Oppenheimer Capital	49
O'Connor Group	253
Pacific Financial Asset	551
Pacific Financial Research	227
Pacific Investment	11
Pacific Mutual	103
PaineWebber	741
Palley-Needelman	440
Palm Beach	851
PanAgora	67
Paradigm Partners	619
Parametric Portfolio	431
Parker Dillon Carlson	815
Parmelee	748
Payden & Rygel	92
PCM Int'l	415
Peckham Boston Advisors	738
Penn Mutual Life	181
Pension Management	785
Pension Portfolio Advisors	*
Peregrine Capital	302
Perkins Capital	796
Peters Gamm	367
Petersen, Flynn	504
Philadelphia Investment	761
Philippe Investment	400
The Phoenix	143
Phoenix Investment	759
Piedmont Capital	792
Pierson Capital	774
Pilgrim Baxter	270
Pinnacle	449
Pioneering	488
Piper Capital	487
Pittsburgh Nat'l	162
Platner	886
PMRealty Advisors	403
Portfolio Group	452
Posthorn Global	531
T. Rowe Price	55
Rowe Price-Fleming	139
T. Rowe Price Guaranteed	196
PRIMCO Capital	62
Prime Asset	617
PRIMECAP	214
Princeton Bank & Trust	493
Princeton Investment	838
Principal Financial	16
Pritchard, Herr	592
Progress Investment	*
Property Capital	340
Provident Capital	193
Provident Investment	117
Provident Nat'l	70
Prudential Asia	846
Prudential Asset	4
Prudential Diversified	237
Prudential Fixed Income	47
Prudential Realty	99
Prudential Securities	250
PSM Investors	450
Public Storage	277
Putnam	68
Quaker Capital	874
QuantiLogic Asset	241
Quest Advisory	434
RAC Advisors	897
Rainier Investment	264
Rampart Investment	*
Ramsay Investment	887
Rayner Associates	839
RCB Int'l	*
RCM Capital	31
Realty Income Advisors	752
Reams Asset	235
W.H. Reaves	310
Reich & Tang	297
Reid McCoy	680
Reimer & Kroger	345
Reiser-Builder/Russell	888
Renaissance	300
Daniel H. Renberg	688
Resource Investments	519
Retirement System Investors	453
RhumbLine Advisors	898
Rice, Hall, James	533
T.O. Richardson	749
Richmond Capital	298
Richter Asset	775
Riggs Investment	273
Rittenhouse Financial	467
Roanoke Asset	464
Robshaw & Cheskin	739
Rock Capital	816
Rocky Mountain	611
Roll & Ross	313
Rosen Associates	397
Rosenberg Institutional Equity	95
N.M. Rothschild Int'l	441
Rothschild	494
Roulston	505
Roxbury Capital	582
RPI Institutional	889
RREEF Funds	146
Ruane, Cunniff	281
Frank Russell Trust	*
RXR Capital	704
Ryan Labs	362
Sabl Weil Investment	821
Ronald Sadoff	776
SAFECO Asset	376
Salem Capital	681
Salomon Brothers Asset	579
Fayez Sarofim	33
M.D. Sass	226
SBC Portfolio	439
Schabacker Investment	786
Schaenen Wood	380
Schroder Capital	144
Schroder Real Estate	460
Schroder Ventures	644
Schuylkill Capital	869
Scimitar North American	565
SCN Capital	378
Scudder, Stevens	52
Seaboard Investment	537
Sears Investment	106
Seattle Capital	339
Securities Counsel	248
Securities Counselors Iowa	401
Security Capital	307
Security Pacific Investment	74
Security Pacific Real Estate	595
Security Trust	79
Alan Seidner	568
Selected Financial	384
J & W Seligman	174
Sentinel Real Estate	260
Shearson Asset	184
Shearson Equity	516
Shearson Lehman Advisors	259
Sheffield Investment	861
Shields Asset	112
Shinnecock Partners	*
Siebel Capital	424
Signet Asset	371
Simpson Capital	862
Sirach Capital	251
Sit Investment	199
Sit/Kim Int'l	673
Cabanne Smith	782
Donald Smith	342
Smith Affiliated	435
Smith Barney	157
Smith Breeden	699
Smith, Graham	797
Smith-Hines	777
Smoot, Miller	286
Snyder Capital	716
Society Corp.	180
Solon Asset	805
Sound Shore	410
Southeast Bank	472
Southeastern Asset	234
Southport Financial	664
Sovran Capital	160
Spare, Tengler	497
Spears, Benzak	323
Spectrum Asset	760
George B. Springman	620
Standish, Ayer & Wood	90
Star Bank/E. Indiana	707
Starbuck Tisdale	682
State Mutual	121
State Street Bank	6
State Street Research	48
SSI	523
Steele	827
Stein Roe	97
Steiner Diamond	833
Sterling Capital	442
Strategic Commodity	*
Strategic Investment	*
Strategic Property	789
Stratton Capital	857
Stratton Mgmt.	511
Strong/Corneliuson	244
STW Fixed Income	108
Sullivan, Morrissey & Mickle	717
Sullivan Money	692
Summit Investment	783
Summit Trust	583
SunBank Capital	78
Swanson Capital	665
K.S. Sweet	834
Systematic Financial	637
Taplin, Canida & Habacht	602
Target Investors	603
TCW Realty	131
Tealwood Asset	890
TEL Advisors of Virginia	908
Tempest, Isenhart	541
Templeton Int'l	194
Texas Commerce	201
1345 Realty	646
Thompson, Siegel	218
Thompson, Unger	669
Thompson/Rubenstein	638
Thorson, Brown	742
Tiffany Capital	778
Todd Investment	465
Torch Energy	576
Touche Remnant	870
Townley Capital	506
Townsend Asset	913
Trammell Crow Realty	169
Transamerica	60
Trascott, Alyson	852
Travelers	17
Trendstat Capital Mgmt.	850
Trevor Stewart	465
Trinity Capital	643
Trinity Investment	203
Trusco Capital	109
Trust Co./West	30
Trust Co./Okla.	650
Trust Fund Advisors	*
TSA Capital	372
Tukman Capital	374
Turner Neill	564
Mark Twain Bank	507
Twin Capital	651
UBS Phillips & Drew Int'l	879
Union Capital Advisors	288
Union Capital Mgmt.	806
Union Labor Life	233
United Capital	138
United Jersey Bank	398
United Missouri	132
United Nat'l Bank	708
U.S. Nat'l/Galveston	535
Unity Mgmt.	390
E. Scott Urdang Real Estate	666
U.S. Trust/New York	170
U.S. Bank	689
U.S. Trust/Texas	750
U.S. Trust/Calif.	514
Valenzuela Capital	718
Valley Capital	379
Value Line Asset	283
Van Cleef Jordan & Wood	817
Van Eck	538
Van Kampen Merritt	483
Van Strum & Towne	822
Vanguard Group	86
Vaughan, Nelson	350
Vector	824
Vilas-Fischer	693
Va. Investment Counselors	561
Voyageur Asset	515
Waddell & Reed	343
Wagner & Hamil	853
Walnut Asset	863
Warburg, Pincus	243
Warburg Investment	192
Ward & Wissner	484
Wardley Investment	322
David E. Ware	880
Washington Square Capital	205
Wedge Capital	291
Weiss, Peck & Greer	111
Wellington	34
Wells Fargo Nikko	2
Wells Fargo Realty	382
Welsh Money	891
Wertheim Schroder	330
West One Trust	448
Western Asset	113
Westwood	293
WFG Investment	847
Widmann, Siff	584
Wilkinson Boyd	842
Willoughby Holin	625
Wilmington Capital	325
Wilmington Trust	282
Wilshire Asset	163
Wilson, Kemp	520
Windham Capital	422
Windsor Realty	658
Winrich Capital	612
William D. Witter	552
Wolf, Webb	230
Denis Wong	667
Wood, Struthers	498
Woodmont Realty	577
WorldInvest	190
Wright Investors'	161
Yamaichi Int'l	546
Yarmouth Group	182
Yasuda Bank & Trust (USA)	916
Yeager, Wood & Marshall	461
Zevenbergen Capital	798

* manager of managers, not ranked

Realty broker alters name, adds services

After 85 years as Coldwell Banker Commercial, the real estate broker has changed its name to CB Commercial Real Estate Group Inc.

In addition, the firm has expanded its brokerage operation and added new services in an effort to become a full-service broker.

The change in the firm's name is a result of an employee-led purchase of the firm in 1989, according to Jesse Harrill, a company spokesman.

The real estate investment banking unit has been restructured and now includes mortgage banking services, which have been fully integrated with the firm's brokerage unit, allowing CB to provide its clients with financial advisory and transaction services.

Corporate services, a new unit, is focused on providing a full range of real estate services to corporations, including appraisal consulting and development services.

The firm also added a central division office in Houston, to supplement its east division office in McLean, Va., and west division office in Anaheim, Calif.

Nine regional offices have been reorganized into subterritories, known as calling areas, allowing the area manager to concentrate on a specific market, according to Mr. Harrill. ■

Managers

Continued from page 1
ment bonds, said Mr. Tanner.

International cash assets more than doubled according to the survey, to $5.5 billion from $2.7 billion.

As international assets grew, domestic equity indexed assets fell a market-adjusted 7.8% the S&P 500 returned −3.1% — to $175 billion from $195.9 billion.

Indexed assets are an easy source of assets for plan sponsors to use to fund new managers or invest in alternative asset classes, said Mr. Peyton. He added the indexing movement has leveled off. Plus, pension executives might have moved some of their passive assets in-house.

Bond indexed funds grew a market-adjusted 12.2% to $58 billion from $47.7 billion. That outstripped market appreciation (the Shearson Lehman Brothers Government/Corporate index was up 8.3% in 1990).

"Long-term bonds were pretty flat," last year, said Mr. Peyton. "Short-term bonds had a better appreciation."

Assets reported for dedicated and immunized bond portfolios, when adjusted for the market, dropped 3.1% to $61.7 billion from $58.8 billion. Structured investments such as dedicated and immunized bonds are popular when interest rates are high, but with interest rates down, this type of hedge against market volatility has lost its popularity.

Among the 500 largest managers of tax-exempt discretionary assets, independent investment managers saw their market share decrease two percentage points to 36%, with insurance companies and banks each gaining an equal share of that.

For the 100 largest tax-exempt managers, independent managers' market share decreased to 26% from 30%. Banks gained three points of that loss, rising to 37%, and insurance companies moved to 37% from 36%.

There are several reasons for the shift in market share, according to David Eager, managing director of Eager & Associates, Louisville, Ky., who said "It's something we've been predicting for five years."

The defined contribution market favors larger providers vs. independent investment managers, who have been less aggressive in going after that market, he said.

There also has been a move toward manager consolidation, especially for larger plans, which can have as many as 80 managers. Corporate pension funds, including, General Motors Co. and American Information Technologies Corp., have said they want to cut back on the number of relationships. "The desire may be to streamline goals," Mr. Eager said. Larger investment firms are the beneficiaries of streamlining, offering multiple products and greater capacity.

"Large institutions are recapturing the market share through their independent subsidiaries, which operate much like independent investment companies," added Mr. Peyton.

A small portion of the loss in market share of independent managers could be accounted for in the mix of assets they held, said Mr. Eager.

According to the survey, independent managers held the largest proportion of stocks (50%), in a year with poor equity returns; banks had 40% allocated to stocks; and insurers, 38%.

Assets invested in equity real estate grew 2.6% to $105.3 billion from $102.6 billion. The market-adjusted return, based on the Russell-NCREIF Property Index's 1.2%, was 1.4%, about the amount that could be accounted for in increased appraisal value, said Mr. Peyton. "Not a lot of fresh cash went into real estate last year."

Among other survey data:

- Mortgage assets grew 3.3% to $102 billion from 98.7 billion.
- Managers reported $86.7 billion in mortgage-backed securities, which were not tracked separately in last year's survey.
- The use of derivatives was down in all categories this year. Only 190 managers reported using options this year, compared with 233 in last year's survey; 104 used stock index futures vs. 128 a year ago; and 107 use fixed-income futures, against 252. ■

DATEBOOK

May 22-23, Chicago: The Treasury Management Association of Chicago is sponsoring the "Fifth Annual Windy City Summit." For information call (708) 480-9080.

May 22-23, "Investing in Venture Capital" is sponsored by the Institute for International Research. For information call (800) 345-8016 or (212) 826-1260.

May 29, Boston: Price Waterhouse Co. is offering "New Developments in Corporate & Municipal Debt." For information contact Janice Dow at (617) 439-4390, ext. 1223.

May 29-30, New York: "Environmental Investing 1991" is sponsored by IBF Conferences. For information call (516) 229-2375.

May 29-30, Washington: Investment Management Institute's "10th Anniversary Portfolio Management Conference" is planned. For information call (212) 370-1518.

May 30, Chicago: "A Small Company Stocks Seminar" is sponsored by the Investment Analysts Society of Chicago Inc. For information call (312) 922-6222.

May 30, telecast via satellite: The "Annual Spring Pension and Compensation Law Update" is sponsored by the American Law Institute-American Bar Association. For information call (800) CLE-NEWS, ext. 1661.

May 30-June 1, Boston: "Investment Company Regulation and Compliance" is sponsored by the American Law Institute-American Bar Association. For information call (215) 243-1630 or (800) CLE-NEWS.

June 1, various locations: The NCCMA Certification Exam is offered. For information call (203) 426-3007.

June 2-4, New York: The "13th Annual International Hospitality Industry Investment Conference" is sponsored by New York University's School of Continuing Education. For information call (212) 790-1338.

June 2-5, Denver: The Government Finance Officers Association has scheduled its annual conference "Climbing to New Heights." Two pre-conference seminars will also be held: "Economic Development Analysis" and "Forecasting During Hard Times." For information contact Karen Utterback at (312) 977-9700.

June 3-4, New Orleans: "Investment Strategies for Public Funds" is sponsored by the Institute for International Research. For information call (800) 345-8016 or (212) 826-1260.

June 3-4, Pittsburgh; **June 20-21**, Romulus, Mich.; **July 8-9**, Cherry Hill, N.J.; **Aug. 19-20**, Newton, Mass.; **Sept. 5-6**, Cincinnati; **Oct. 9-10**, Charlotte, N.C.; **Nov. 18-19**, St. Louis: McKay Hochman Co. Inc. offers a seminar on the fundamentals of qualified plans. For information contact Julie Dellapi or Carol Sterling at (201) 492-1880.

June 3-5, Arlington, Va.: "Spark 1991 National Conference for Defined Contribution Plan Record keepers" is sponsored by the Society of Professional Administrators and Record keepers. For information call (203) 683-0336.

June 3-5, San Francisco: "Sifting Through the Chaos: New Tax-Exempt Fund Opportunities" is presented by Callan Investments Institute's 11th annual spring conference. For information contact Betty Bennett at (312) 346-3536.

June 3-7, San Francisco: The New York Institute of Finance is sponsoring a series of West Coast seminars. For information call (212) 344-2900.

June 4, Chicago; **June 5**, New York; **June 11**, Los Angeles: Capital Management Sciences will host workshops on fixed-income management systems. For information contact Joyce Kidd at (213) 824-9715.

June 5-6, San Francisco: "Venture Investing 1991" is co-sponsored by IBF Conferences and Hambro International Venture Funds. For information call (516) 229-2375.

June 8-14, Boulder, Colo.: The American Bankers Association is offering its "National School of Bank Investment & Financial Management." For information call (202) 663-5430.

June 9-13, Pebble Beach, Calif.: BARRA offers its 15th "Equity Research Seminar." For information contact Marleigh Stone at (415) 548-5442.

June 9-13, Reston, Va.: The American Bankers Association is sponsoring a "Corporate Trust Workshop." For information contact Lisa Coe at (202) 663-5289.

June 10-12, Chicago: The Options Institute at the Chicago Board of Options Exchange is offering a retail brokers program. For information contact Dianna Feltman at (312) 786-7760.

June 10-14, July 22-26, Aug. 12-16, Sept. 23-27, Brookfield, Wis.: "Fundamentals of Employee Benefits Courses" is scheduled by the International Foundation of Employee Benefit Plans. For information call (414) 786-6700.

June 10-14, Newton, Mass.; **July 22-26**, Denver; **Oct. 21-25**, Secaucus, N.Y.; **Jan. 13-17**, Lake Buena Vista, Fla.: Retirement training programs are offered by McKay Hochman Co. Inc. For information contact Julie Dellapi or Carol Sterling at (201) 492-1880.

June 11-12, Dallas: "Federal and State Employment Regulations in Texas" is offered by the Institute of Business Law. For information call (213) 450-0500.

June 12, Boston: Price Waterhouse Co. is offering a seminar on foreign securities. For information contact Janice Dow at (617) 439-4390, ext. 1223.

June 12-13, New York: "New Exchange Offer Techniques for Issuers and Bondholders" is presented by the Institute for International Research. For information call (800) 345-8016 or (212) 826-1260.

June 12-14, New York: The Securities Industry Association has scheduled an information management conference and exhibit. For information contact Karen San Antonio at (212) 608-1500, ext. 535.

June 13-14, Chicago: Morningstar's fourth "Mutual Fund Enterprise Conference" is planned. For information contact Michelle Levell at (312) 427-1985.

June 16-17, Washington: A "Mutual Funds Workshop" is planned by the American Bankers Association. For information contact Leslie Jackson at (202) 663-5108.

June 17-21, Oct. 7-11, Brookfield, Wis.: "The Fundamentals of International Employee Benefits" is offered by the International Foundation of Employee Benefit Plans. For information call (414) 786-6700.

June 19-20, Washington: *Pensions & Investments* is sponsoring the " *P&I* Investment Management Conference. For information contact IBF Conferences at (516) 229-2375.

June 20, New York: Price Waterhouse Co. is offering "Industry Issues for Directors." For information contact Janice Dow at (617) 439-4390, ext. 1223.

June 24-25, New York: "Investing in CMOs and Mortgage Derivative Products" is offered by the Institute for International Research. For information call (800) 345-8016 or (212) 826-1260.

June 24-26, Lake Tahoe, Nev.: The International Foundation of Employee Benefit Plans has scheduled its trustees and administrators institutes. For information call (414) 786-6700.

June 24-27, New York: "The Global Investment Operations Congress" is sponsored by the Institute for International Research. For information call (800) 345-8016 or (212) 826-1260.

June 25, New York: "Marketing Investment Services to the Middle Market" is offered by the Investment Management Institute. For information call (212) 370-1518.

June 25-26, New York: PaineWebber is sponsoring "Asset Class Management for Pension Funds: Applications of Derivatives, Synthetics, Swaps and Portfolio Trading." For information contact Noreen McDonough at (212) 713-3912.

June 26-27, Chicago: The Institute for Business Law at California State University is offering "Employment Regulations in Illinois." For information call (213) 450-0500.

July 1-5, Boston: The American Law Institute-American Bar Association is offering "Basic Law of Pensions and Deferred Compensation." For information call (215) 243-1630 or (800) CLE-NEWS.

July 8-12, Palo Alto, Calif.: "Advanced Law of Pensions and Deferred Compensation" is offered by the American Law Institute-American Bar Association. For information call (215) 243-1630 or (800) CLE-NEWS.

July 8-10, Boston: The International Foundation of Employee Benefit Plans is sponsoring the "1991 Benefit Conference for Public Employees." For information call (414) 786-6700.

July 8-12, Ames, Iowa: The American Bankers Association is offering "Graduate School of Agri-Finance & Banking." For information call (202) 663-5430.

July 14-19, Princeton, N.J.: An "Investment Management Workshop" is offered by the Association for Investment Management and Research. For information call (804) 977-8156.

July 14-19, Madison, Wis.: The American Bankers Association is sponsoring "Graduate Real Estate Finance School." For information call (202) 663-5430.

July 15, New York: "Foreign Currency: The New Asset Class" is planned by the Institute for International Research. For information call (800) 345-8016 or (212) 826-1260.

July 15-17, White Sulphur Springs, W. Va.: The International Foundation of Employee Benefit Plans is sponsoring an investment institute. For information call (414) 786—6700.

July 15-17, Oct. 14-16, Brookfield, Wis.: An "Introduction to Strategic Employee Benefits Planning Conference" is sponsored by the International Foundation of Employee Benefit Plans. For information call (414) 786-6700.

July 24-25, New York: "Performance Measurement" is sponsored by the Institute for International Research. For information call (800) 345-8016 or (212) 826-1260.

July 28-Aug. 2, Evanston, Ill.: The Association for Investment Management and Research is offering a financial analysts seminar. For information call (804) 977-8156.

Aug. 1, New York: "Bondholder Recovery Strategies" is sponsored by the Institute for International Research. For information call (800) 345-8016 or (212) 826-1260.

Aug. 4-9, Boulder, Colo.: The American Bankers Association is sponsoring the "Business of Banking." For information call (202) 663-5430.

Aug. 4-16, Evanston, Ill.: A "National Graduate Trust School" is offered by the American Bankers Association. For information call (202) 663-5430.

Aug. 5-6, St. Louis; **Oct. 7-8**, Nashville, Tenn.; **Nov. 7-8**, Newton, Mass.; **Dec. 5-6**, San Francisco: "Retirement Planning Insights '91" is offered by McKay Hochman Co. Inc. For information contact Julie Dellapi or Carol Sterling at (201) 492-1880.

Aug. 5-7, Beverly Hills, Calif.: "1991 Retire Health Care Benefits Conference" is sponsored by the International Foundation of Employee Benefit Plans. For information call (414) 786-6700.

Aug. 10-15, Orlando, Fla.: The National Conference of State Legislatures will hold its 17th annual meeting. For information contact Susan Seladones or Kathleen Proa at (202) 624-5400.

Aug. 12-14, Toronto: The International Foundation of Employee Benefit Plans is sponsoring "1991 Benefit Communications Institute." For information call (414) 786-6700.

Aug. 21-27, Dallas; **Sept. 29-Oct. 5**, Washington; **Oct. 6-12**, Atlanta; **Nov. 17-23**, San Diego; **Dec. 8-14**, Chicago: "Managing Real Estate as an 'Investment'" is offered by the Institute of Real Estate Management. For information call (312) 661-0004.

Oct. 14-18, Philadelphia: The fundamentals of money management workshops are sponsored by the International Foundation of Employee Benefits. For information call (414) 786-6700.

Nov. 6-8, Boston: "Venture Forum '91" is presented by Venture Economics Publishing Co. For information contact Adam Kopp or Josephine Antonellis at (617) 449-2100.

Dec. 4-7, Boca Raton, Fla.: The Securities Industry Association has scheduled its annual convention. For information contact Karen San Antonio at (212) 608-1500, ext. 535.

Pension Portfolio Advisors set to tap Hong Kong market

SOUTHFIELD, Mich. — Pension Portfolio Advisors has launched the Star Performer Account, a multimanager U.S. equity mutual fund to be marketed to individuals in Hong Kong.

It is the first such fund to be approved by the Hong Kong Securities and Futures Commission, said Mike Jenkins, director of investment research at PPA. Hong Kong nationals may buy U.S. mutual funds, but the funds may not actively solicit such business without commission approval.

The fund offers two variations of a tactical asset allocation strategy using equities and cash. Investors may choose the growth option, in which their share of the fund is between 80% and 100% invested in equities, or the conservative option, in which it is 40% to 60% invested.

The fund will use other mutual funds for its equity exposure. PPA, a consulting firm, will make the allocation decisions and select equity funds.

The equity portion will be divided among five mutual funds. Twentieth Century Ultra Investors and Twentieth Century Growth Investors are both growth-oriented funds. Lindner Fund #1 and Financial Industrial Income Fund are value-oriented. Vanguard Index Trust-500 Portfolio is a passive fund tracking the Standard & Poor's 500 Stock Index. National Bank of Detroit will manage the cash portion. ■

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May 27, 1991

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AT DEADLINE

Holland sets up own firm

Lou Holland, a partner in the investment management firm Hahn, Holland & Grossman, will leave to start his own firm June 1.

"Basically, I've been in business 23 years and decided to start my own firm," Mr. Holland said. He termed the parting with partners Donald Hahn and Kenneth Grossman "amicable."

Holland Capital Management will offer active equity and fixed-income management.

Sentinel acquires Meyer

Sentinel Real Estate has acquired Meyer Real Estate Advisors for an undisclosed sum. John H. Streicker, president and chief investment officer for Sentinel, said the acquisition gives Sentinel a West Coast office and skilled personnel for investment and management of industrial properties.

Joint venture formed

Chancellor Capital Management and London-based POSTEL Investment Management have formed a 50-50 joint venture, Chancellor-POSTEL Private Eurocapital, to manage European alternative investments, primarily for U.S. institutional investors.

Cook Inlet closes doors

Cook Inlet Investment Management Inc., San Francisco, has been told to close its doors.

Cook Inlet Region Inc., parent of the 2-year-old money management firm, decided to close it after unsuccessfully seeking a joint venture partner, said James Elder, chief investment officer. The firm managed $107 million, all from various Cook Inlet entities. No decision has been made on the assets.

Funds allocate assets

The **Minnesota State Board**

See **At Deadline** *on page 35*

INSIDE

RICHARD STERGALZ

Small-stock illusions

Small-capitalization stocks, like any investment style, have nuances all their own. And a lot of tough questions must be answered to make sure a fund is really getting its money's worth. In Commentary, Page 14.

Suits start in First Executive fiasco

Unisys, Honeywell the first targets

By Hillary Durgin

Unisys Corp. and Honeywell Inc. are facing lawsuits from defined contribution plan participants to recover losses on guaranteed investment contracts issued by units of First Executive Corp.

UNISYS

This first volley of lawsuits — eight against Unisys and one against Honeywell as *Pensions & Investments* went to press — is likely to be duplicated at other companies. The cases raise questions about investment diversification, range of investment choice and disclosure that are likely to spread beyond the $200 billion GIC market to encompass general issues of fiduciary responsibility.

Meanwhile, Congress and federal regulators are seeking ways to protect benefits for plan participants affected by the First Executive crisis.

The class-action complaints charge Unisys, Blue Bell, Pa., and Minneapolis-based Honeywell with violating fiduciary duties and disclosure requirements under the Employee Retirement Income Security Act of 1974. Executives of the companies declined comment.

"The core of all the claims against the employer plans is that they should not have invested in the first place if they had been prudent, and that they should have disinvested . . . when things deteriorated in 1988, 1989," said Seymour J. Mansfield, partner at Mansfield and Tanick, Minneapolis, which is representing Unisys plan participants in a suit filed May 9 in U.S. District Court for the Minnesota District.

Meanwhile, Sen. Howard Metzenbaum, D-Ohio, has threatened to launch an investigation of every pension plan that bought Executive Life annuities or GICs. He also plans to examine the actions of the Department of Labor and the Pension Benefit Guaranty Corp. in overseeing annuity purchases, said Michele L. Varnhagen, counsel for pensions and employee benefits for the Senate Committee on Labor and Human Resources Subcommittee on Labor.

"Executive Life is going to prove to be an example of how enforcement under ERISA may not be working," Ms. Varnhagen said, speaking at the annual meeting of the Association of Private Pension & Welfare Plans, Washington.

In April, California and New York state regulators seized two First Executive Corp. subsidiaries — Executive Life Insurance Co., Los Angeles, and Executive Life Insurance Co. of New York, Jeri-

See **Lawsuits** *on page 35*

Investors cut foreign trade costs

By Trudy Ring

International investors are beginning to use some of the same strategies — including directed brokerage, crossing systems and derivatives — employed in the U.S. equity market to reduce transaction costs.

Among the innovators are Owens-Illinois Inc., Murray Johnstone International Ltd. and State Street Bank and Trust Co. Many other pension fund executives and money managers, however, are just beginning to look at international transaction costs and trying to quantify them.

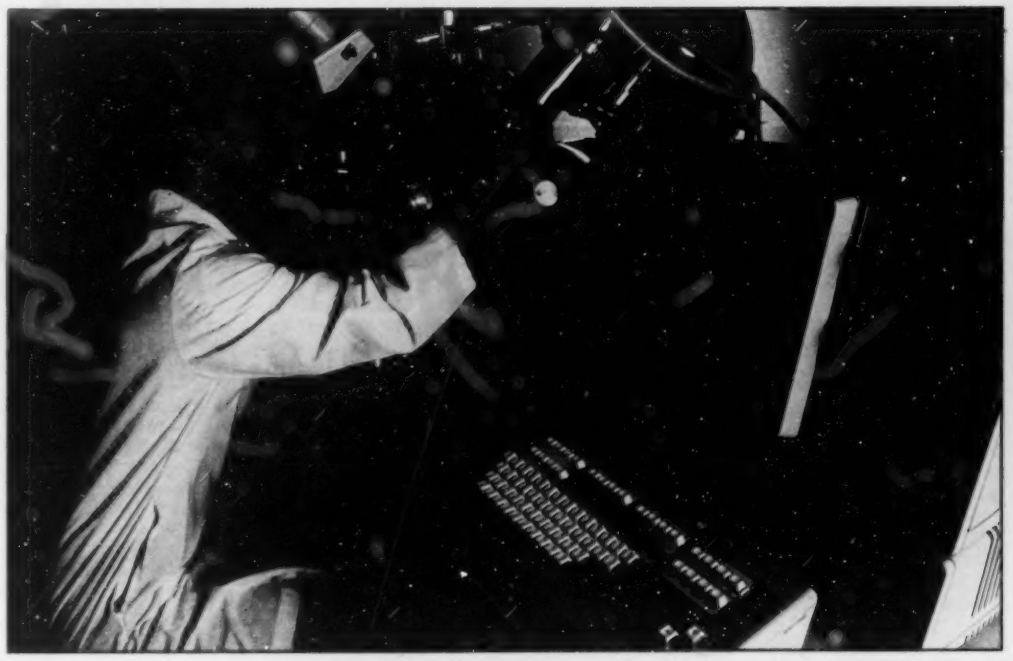
Owens-Illinois, Toledo, Ohio, has started directing a small portion of its international brokerage, while still allowing managers to work with the brokers of their choice on the majority of trading.

"We're kind of sticking our toe in the water," said Ronald C. Boller, director-benefit finance at Owens-Illinois. He noted that when trying to lower costs, it's important to avoid interfering with managers' styles and their ability to add value.

Owens-Illinois, with $2.3 billion in pension assets, has about 15% in international equities and 4% in international bonds. Mr. Boller said the fund is directing "a minor part" of its international brokerage.

Use of directed brokerage in international markets is likely to grow, as large pension investors are interested in recapturing some of their commission dollars, said Robert Kay, president of Global Securities Consulting Services Inc., New Providence, N.J.

See **Costs** *on page 34*



Dow Chemical executives now are willing to discuss with investors the issue of independent directors.

Funds finding victory in defeat

Failed resolutions lead to new talks

By Marlene Givant Star

Proxy resolutions on independent directors were defeated, but institutional investors might have won a bigger victory than the numbers suggest.

For example, Dow Chemical Co. and Waste Management Inc., which unsuccessfully fought to have such proposals omitted from their proxies, agreed to meet with shareholders to discuss the independent directors issue.

"Based on discussions we had immediately after the vote, Dow is amenable to finding a solution," said Luther Jones, manager of corporate affairs of the Florida State Board of Administration, Tallahassee, which owns 815,540 shares of Dow Chemical and sponsored the proposal at Dow.

Waste Management officials plan to meet next month with the executive board of the Council of Institutional Investors, Washington, to exchange views on the independent directors issue.

Indeed, if companies are willing to work toward picking independent directors, some investors say the funds might not need to go through the proxy process to achieve results next year.

Still, shareholder support for independent director proposals held few surprises, and was on par with other first-time corporate governance proposals.

Votes ranged from 26.1% for a proposal filed by the $48 billion New York State and Local Retirement Systems at Occidental Petroleum Corp. to 15% for Florida's resolution at Dow, a company where shareholder proposals seldom get big votes.

Poison pills got an average of 26% the first year they were introduced, according to Peg O'Hara, director of the corporate governance service of the Investor Responsibility Research Center, Washington.

Shareholder proposals tend to

See **Directors** *on page 34*

NEWS DIGEST

ANTHONY F. FICKE

Coke, which launched a $450 million investment program to build its business in eastern Germany, is one of several companies pursuing expansion in foreign markets. Page 28.

SPECIAL REPORT: CROSS-BORDER FINANCING

A dearth of global M&A activity hasn't slowed some companies from pursuing expansions of their business lines into overseas markets. Page 28.

U.S. tax law complicates financing matters for American companies with foreign units. Page 28.

FINANCING

Comdisco's private debt issue was the first in a series of offerings in which the company will raise $550 million by mid-June. Page 3.

INTERNATIONAL

Some familiar trading tactics, including crossing systems and directed brokerage, are used to control international investors' transaction costs. Page 1.

Public and midsize corporate funds spearhead a wave of activity by first-time foreign investors. Page 2.

REAL ESTATE

The cachet of the Empire State Building might help Prudential Insurance attract an all-cash buyer. Page 2.

Environmentalists' efforts to restrict timberland cutting boosts the returns of two commingled funds. Page 17.

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Funds make foreign debut

Public plans lead $660 million surge since late 1990

By Trudy Ring

A new wave of pension funds, particularly public and midsize corporate funds, has entered the international investment markets.

These first-time investors have deployed about $660 million in assets in the non-U.S. markets since late 1990. Factors fueling their moves have been a greater understanding and acceptance of international investing, good performance by international markets and, for some of the smaller funds, greater availability of pooled vehicles.

Among the public pension funds that have made their first international moves in recent months are the $34 billion New Jersey Division of Investment, Trenton; the $3.7 billion Teachers Retirement System of Louisiana, Baton Rouge; the $1.4 billion Arkansas Public Employees' Retirement System, Little Rock; the $815 million Minneapolis Employees' Retirement Fund; the $550 million San Jose, Calif., Police & Fire Department Pension Plan and the $450 million San Jose Federated City Employees' Retirement System; the $530 million Firemen's Annuity & Benefit Fund of Chicago; and the $225 million Anchorage, Alaska, Police and Fire Retirement System.

Corporate funds that have made initial international allocations include the $250 million Electronic Data Systems Corp. pension fund, Dallas; the $145 million Wisconsin Power & Light Co. fund, Madison; the $100 million MCI Communications Corp. fund, Washington; the $70 million UtiliCorp. United Inc. fund, Kansas City, Mo.; and the $30 million Morrison Inc. fund, Mobile, Ala.

Funds eyeing a move into international in the near future include the $1.4 billion North Dakota State Investment Board, Bismarck, and the $1.25 billion Nebraska State Investment Council, Lincoln. Also, the $1.8 billion Missouri State Employees' Retire-

See **Debut** *on page 34*

Pru wants cash for landmark

By Trudy Ring

Prudential Insurance Co. of America is pursuing an all-cash sale of the Empire State Building to potential buyers that include foreign investors, large pension funds and its current leaseholder.

The cachet of the building, one of the most famous and recognizable features of the Manhattan skyline, may help attract a buyer despite the poor real estate market and what some observers consider to be an unfavorable lease situation.

The building is one of the holdings of Prudential's $107 billion general account, in which the company invests its insurance premiums.

Prudential officials declined to state the value of the building or the price they expect it to fetch. Other managers and consultants, however, estimated it would bring between $25 million and $50 million.

Although Prudential would provide no financing, a buyer would be free to find financing from other sources, said John Hoffman, senior vice president of Prudential Realty Group, Newark, N.J., the insurance company's real estate adviser.

The insurer is selling the building because it wants to generate capital gains for the general account, Mr. Hoffman said. He declined to say how the proceeds might be deployed. He estimated it may take 60 to 90 days to find a buyer.

See **Empire** *on page 33*

AP/WIDE WORLD PHOTO

Purchase of the Empire State Building would be more a financial transaction than a real estate one because of a lease arrangement.

3 banks favor no BIC insurance

By Joel Chernoff

WASHINGTON — While the insurance industry has fought to eliminate pass-through insurance for bank investment contracts, it's three big New York banks that hope to gain from the provision's repeal.

That's because the provisions adopted May 14 by the House banking subcommittee on financial institutions would remove a major impediment to the big banks' ability to compete in the $200 billion investment contract market: Federal Deposit Insurance Corp. premiums of 19.5 basis points on bank deposits, soon to go up to 23 basis points.

"As long as we don't start 23 basis points behind the line, we can do without deposit insurance," said Douglas Kidd, senior vice president, Bankers Trust Co., New York.

Despite the rhetoric floating through Washington, the leading BIC issuers — Bankers Trust, J.P. Morgan & Co. and Citibank — were just as happy to shed the

See **Banks** *on page 35*

H.R. 1505's effect on pass-through insurance for pension investments in bank products

Type of plan	
Public defined benefit	Pass-through retained
Employer-directed defined contribution	Pass-through eliminated

Proposed GM issue draws investor interest

By Curtis Vosti

Institutional investors are intrigued with General Motors Corp.'s proposed special convertible preferred stock offering.

The Preference Equity Redemption Cumulative Stock, PERCS, is awaiting clearance from the Securities and Exchange Commission. It would make available 16 million shares of a special GM stock that would pay a higher dividend than the common stock and could be converted one-for-one into shares of GM common stock three years from now. Those features would give investors downside protection.

But upside potential is limited: The stock can be called by GM anytime on 15 days' notice before July 1, 1994.

"It's an interesting concept," said Michael McCowin, principal and portfolio manager at Harris Bankcorp., Chicago, which owned 1.5 million shares of GM as of Dec. 31, according to Spectrum 3, a compendium of 13(f) filings with the SEC, published by CDA Investment Technologies Inc., Rockville, Md.

"It's very much like common stock but with a buy-write strategy," he said, referring to the call feature. "Any corporate issuer who would consider preferred stock ought to consider it. It won't be very volatile."

The Teacher Retirement System of Texas will wait and see, according to George Reagan, acting chief executive officer. The $23.7 billion system owned more than 2.13 million shares of GM common as of March 31.

"We're not pathfinders. We want to see how it trades," Mr. Reagan said. "We're a public pension fund; we're not in the business of breaking new ground."

Mr. Reagan said the offering reminds him of a 1988 proposal from Avon Products Inc. that was called recently. Avon's offering, also called PERCS, was made after the firm cut its common stock dividend 50%.

GM announced its PERCS offering earlier this month, three months after it cut common stock dividends 47%.

"I think GM especially chose this because they had just cut the dividend on its common stock," said one GM analyst who asked not to be identified. "I think GM is a real test case for this type of product."

'It's a swap of yield for price appreciation," said Michael Bowyer, GM analyst for Duff & Phelps Inc., Chicago. "It's convertible to common, but only when it's in (the company's) favor. I would expect it to be called."

Mr. Bowyer said he thinks GM is looking to "entice a different type of investor," one focusing on yield, to its stock, which he said is undervalued.

Tony Kreisel, senior portfolio manager and auto analyst for The Putnam Cos. Inc., Boston, said he would recommend a blend of PERCS and common stock. "If you're going to own GM, own a little bit of this and a little bit of that."

He said although the PERCS would be considered a tactical play, it still could be a three-year investment, not too short a time for a long-term investor like pension funds.

"It should have less volatility and less downside participation because of the higher dividend yield," Mr. Kreisel said. "But it should track relatively well on the upside."

That could be the difference between the GM and Avon offerings, he said. "The Avon issue acted a little bit funny," he said. "It didn't track as well on the upside, particularly because Avon at the time of the issue was in the midst of a takeover play."

He said the Avon PERCS was not as liquid as investors would have liked. Investors wanted to own the common because it was a takeover possibility.

That will be different with the GM offering, if approved, he said.

"This is GM. No one's going to take over GM." ■

JOE WILSSENS

General Motors' proposed preferred stock would be a tactical play for some investors.

Comdisco's 3 offerings a hit

By Marlene Givant Star

ROSEMONT, Ill. — Comdisco Inc., a computer and high-technology equipment lessor, will have raised $550 million by mid-June in the public and private debt markets even though its industry has been out of favor.

The early success of the $100 million private placement of unsecured senior notes, which is scheduled to close before mid-June, paved the way for several public offerings — including Comdisco's first securitized public deal — that might otherwise have been considered too expensive given market conditions for financial service companies.

The lead investor in the private deal was CIGNA Corp., Hartford, Conn.

The placement "represented a new source of financing for us, another arrow in the quiver," said John Vosicky, senior vice president and chief financial officer of Comdisco. Whereas Comdisco frequently had issued secured, nonrecourse medium-term notes, the private deal was its first unsecured recourse borrowing.

"The market for financial services debt instruments deteriorated rapidly last year" because of bad news about the industry as a whole, said Stephen Monahan Jr., managing director-corporate finance of Continental Bank, Chicago, the placement agent.

"The spread between industrial and financial services (paper) widened tremendously," by more than 50 to 75 basis points, he said. Since then, the spreads have begun to contract, with the most improvement among AA or A rated credits. Spreads also are beginning to narrow for BBB rated credits; Comdisco is rated BBB+ by Standard & Poor's Corp., New York.

Circulation of public and nonpublic information on the company to a targeted group of investors and meetings between management and potential buyers and debt analysts were critical to the private deal's success.

Comdisco's experience illustrates how the private market increasingly is being used for the purpose it was intended. "The private placement market is becoming a market for companies that need more analysis," said Dennis P. McCrary, managing director-global trading and distribution at Continental.

In a structure it has used for many other leasing and finance companies in the past three years, Continental created a hybrid security that looked like a medium-term note, with bullet maturities of three, four and five years, and coupon rates of 8.73%, 9.02% and 9.38%, respectively. "Yet the bonds had (loan) covenants with real teeth in them," Mr. Monahan said.

Comdisco followed up the oversubscribed private deal with a $150 million four-year 8.95% senior notes offering May 15. Merrill Lynch & Co., New York, was lead manager.

The company's first $300 million AAA-rated public asset-backed deal — issued through a trust — came to market last week. Salomon Brothers Inc., New York, was lead manager.

"It's the first time we've done this in the public market," Mr. Vosicky said, noting the company did smaller securitized private placements in 1984 and 1985.

The asset-backed issue also represents the first time a senior-subordinated structure was used with high-technology lease receivables. Typically, such a structure has been used for deals backed by automobile receivables and mortgages, Mr. Vosicky said.

The coupon on the securitized issue will be less than 8%, he said.

Proceeds will be used to pay down short-term debt. Proceeds of the private deal will be used to refinance short-term debt and purchase equipment for lease, specifically IBM Corp.'s new line of Summit high-powered mainframe computers.

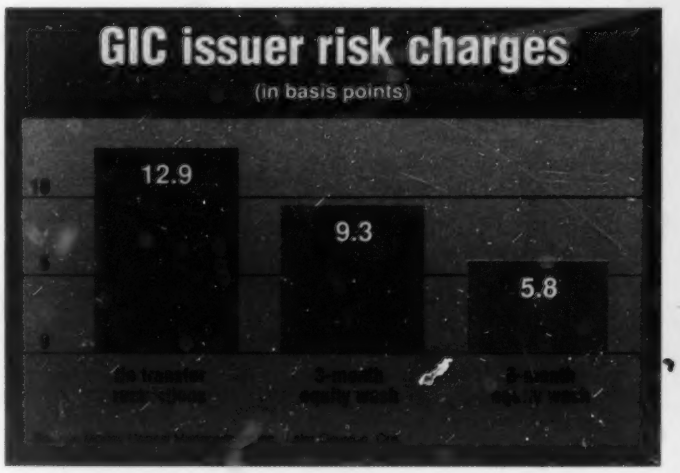
When Comdisco started looking at financing options in February, "the private market seemed to be a little more aggressive in terms of pricing" than the public market, Mr. Vosicky said. Otherwise, Comdisco might have borrowed under its medium-term notes program.

The private issue provided Comdisco with a frame of reference against which to evaluate the pricing of a public bond offering. In addition, the success of the private deal allowed spreads to narrow even further on Comdisco's subsequent public deal, Mr. Vosicky said.

Private deals typically trade at 10 to 15 basis points over public deals, but Comdisco's was only five to 10 points over that of the $150 million public offering.

Comdisco had net earnings of $23 million on record revenue of $580 million for the quarter ended March 31. But because of the

See **Comdisco** *on page 35*



Plan sponsors eye new 401(k) options

By Curtis Vosti

Plan sponsors are taking a second look at their 401(k) investment options since California shut down Executive Life Insurance Co. and First Capital Life Insurance Co.

In doing so, they are learning that adding choices to the 401(k) plan often subtracts from guaranteed investment contract returns.

Trustees of the $50 million 401(k) plan at Reynolds + Reynolds, Dayton, Ohio, which did not contract with the seized insurers, are considering three options.

Craig Currier, director of pension administration, said the board will consider keeping the GICs — which comprise 80% of the assets — but maintaining a sharp eye on credit quality; investing new money and assets from maturing GICs in a blend of GICs and U.S. government obligations; or starting a money market fund.

Mr. Currier said the blended option will produce returns of between 60 and 75 basis points less than the pure GIC portfolio and will result in participant statements with investments marked to market instead of by the familiar book-value accounting of GICs.

"They aren't going to realize an unrealized gain, and that can be confusing for participants," he said.

The money market choice, he said, is "too radical a move" be-

See **GICs** *on page 33*

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Markowitz to speak at P&I conference

Harry Markowitz, co-recipient of the 1990 Nobel Memorial Prize in Economics, will be a keynote speaker at *Pensions & Investments*' second annual Investment Management Conference.

Mr. Markowitz, professor of finance at Baruch College of the City University of New York, will speak during lunch on the second day on whether the Efficient Market Theory needs to be updated.

The keynote luncheon speaker on the first day will be Steven Einhorn, partner of Goldman, Sachs & Co. He will give an investment outlook and portfolio strategies.

Other conference topics and speakers include:

• Peter Aldrich of Aldrich, Eastman & Waltch Inc. will moderate a panel on whether real estate is fatally wounded.

H. Markowitz

The panel comprises Robert Angelica of American Telephone & Telegraph Co., Leslie Smith Britto of Trans World Airlines Inc., John Carroll of GTE Investment Management Corp., Paul Lowman of ASB Capital Management Inc. and Kincaid Patterson of BellSouth Corp.

• Capital Guardian Trust Co.'s John H. Seiter will lead a group discussion on the appropriate exposure to international investments and which markets and trends to follow.

Other speakers will be Teresa Goodale of AT&T, Steve Crosby of U S WEST Inc. and Mauricia Geissler of SEI Capital Resources Co.

• BARRA's Andrew Rudd will head up a session on whether there is anything new in asset allocation.

William Fouse of Mellon Capital Management Corp. and Robert Haugen of the University of California-Irvine will be the two panelists.

The conference is being held June 19 and 20 at The Park Hyatt, Washington. ■

If you thought only stocks and bonds offered yield,

watch this.

Goldman Sachs Commodity Index

The Goldman Sachs Commodity Index (GSCI) is the first benchmark designed to reflect the yield potentially available through the trading of commodities.

For, like stocks and bonds, commodities have total returns made up of price movement *and* yield.

By measuring total return, the GSCI provides a commodities benchmark that is comparable to the standard stock and bond indices.

This allows participation in the commodity markets — through direct trading or a managed account program — in order to achieve a balanced portfolio.

By all means, watch the GSCI daily on Reuters page GSCI.

Goldman Sachs

CORRECTIONS & CLARIFICATIONS

• A May 13 article should have said **Cubic Corp.** has $25 million of its cash portfolio in preferred stock and is looking at dividend capture strategies offered by Twenty-First Securities Corp.

• **Vinnie Princiotta** joined Elkins/McSherry Co., New York, as managing director-equity trading. Mr. Princiotta's name was misspelled in a story May 13.

• The following profile was omitted inadvertently from the May 20 Money Manager Profiles issue.

Resource Investors Management Co.
22 Waterville Road, Avon, Conn. 06001; (203) 678-8100

Total assets managed	$250,000,000
Total discretionary	$240,000,000
Total tax-exempt assets	$107,000,000
Total discretionary tax-exempt	$107,000,000
Tax-exempt clients	12
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	5

Resource Investors Management Co. specializes primarily in oil and gas activities.

Investments are made in secured debt securities with equity participations and join venture exploration and development programs.

The tax-exempt asset mix Jan. 1 was 10% bonds and 90% oil and gas limited partnerships.

John Parsons and Roy Hood are client contacts.

• **Metropolitan Life Insurance Co.** was omitted from the May 20 listing of the 25 largest managers of 401(k)/457 plan assets. The insurer, with $10.1 billion, would have ranked third, boosting the total to $149.831 billion.

WASHINGTON

Restoring state damages laws draws businesses' ire

■ Pending legislation would resurrect state punitive damages laws against insured benefit plans that unfairly deny workers their claims.

The legislation would reverse a 1987 Supreme Court decision, Pilot Life vs. Dedeaux. In its decision, the high court held the Employee Retirement Income Security Act of 1974 pre-empts state laws setting insurance-industry standards for health benefit claims, including state-level punitive damages provisions.

The effect of the ERISA preemption has been to permit insurance companies to deny health insurance claims with impunity, Sen. Howard Metzenbaum, D-Ohio, said at a recent Senate Labor subcommittee hearing. Sen. Metzenbaum has introduced The ERISA Preemption Amendments of 1991, S. 794. A similar bill, H.R. 1602, was introduced by Rep. Howard Berman, D-Calif., in the House.

Self-insured plans would not be affected by either bill in their present forms.

The bills have garnered significant opposition from business. The health insurance industry maintains the potential risk of punitive damage awards would limit their ability to provide affordable group policies, which would increase the nation's uninsured.

The U.S. Chamber of Commerce also opposes the bill, fearing it would increase litigation costs for small employers.

TOM REED

Sen. Howard Metzenbaum's bill is opposed by the health insurance industry and the U.S. Chamber of Commerce.

REAL ESTATE

Falling values offset realty income

■ The income return from real estate continues to be swallowed up by falling property values, according to the Russell-NCREIF Property Index.

For the year ended March 31, the index reported a barely positive total return of 0.4%.

For the year, the property index reported an income return of 6.7%. But the falling market value of properties for the year, −6.34%, almost equaled the income.

For the first quarter of 1991, the index reported a total return of −0.19%. The previous quarter, the index also had a negative total return, with −1.63%.

There are 1,506 properties in the index with an appraised value of $22.2 billion.

PROXIES

SEC getting closer to proxy reform

■ The Securities and Exchange Commission is inching its way toward its long-awaited overhaul of its proxy voting rules.

The latest gleaning of the SEC's intentions came April 23, when SEC Chairman Richard C. Breeden asked the House Telecommunications and Finance Subcommittee to hold off on legislation regulating "roll-ups" of limited partnerships. In a roll-up, a number of limited partnerships are merged into a single publicly traded entity, but investors have complained their rights have been abused in the process and they have suffered losses.

The connection between roll-ups and proxy reform is that The Limited Partnership Rollup Reform Act of 1991 "would make it difficult for us to frame uniform rules governing proxy and tender offers for corporate as well as partnership entities," Mr. Breeden said in his testimony before the House panel.

The bill, H.R. 1885, he complained, would establish specific rules for roll-ups while the SEC is trying to take a broader view in its proxy reform project.

R. Breeden

The SEC already is considering easing rules restricting communications among investors as part of its proxy reform, Mr. Breeden said. In addition, the commission is contemplating making access to shareholder lists much easier for other investors.

INTERNATIONAL

Countries down under finish on top

■ New Zealand and Australia had the world's best-performing stock markets in April, both in local currency and U.S. dollar terms, according to Morgan Stanley & Co.

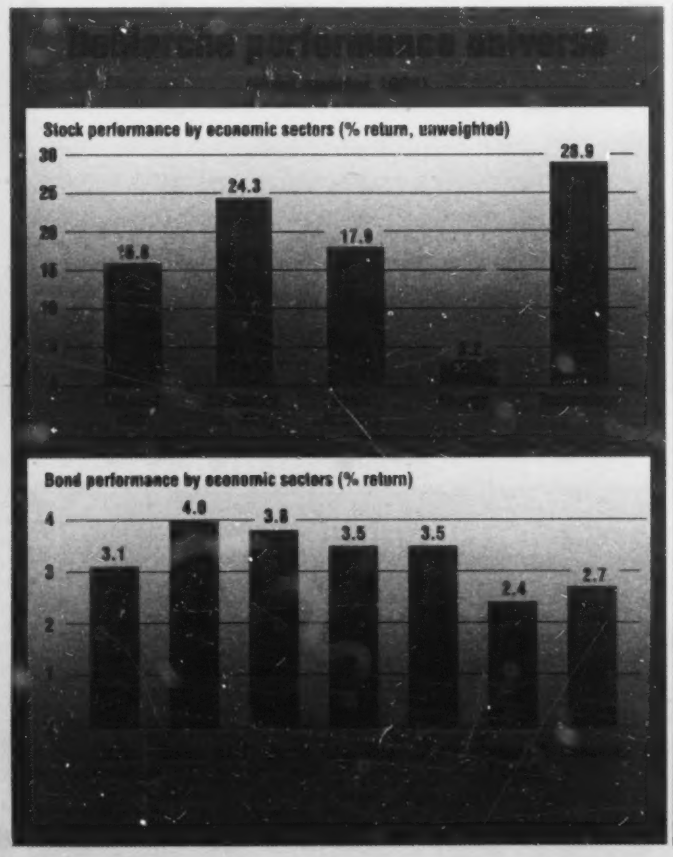
New Zealand's market was up 8.2% in local currency and 8.4% in U.S. dollars; Australian stocks rose 6.8% in local currency and 7.6% in U.S. dollars.

The MSCI World Index rose 0.2% in terms of its component currencies and 0.6% in dollars. The MSCI Europe Australia Far East Index rose 0.3% in component currencies, 0.8% in dollars.

Germany had the third best performance, with a 5.6% gain in deutsche marks and 3.3% in dollars, but Europe overall had lackluster performance, depressed further by the strong dollar. European markets rose 0.7% in local currencies and declined 1.3% when converted to dollars.

The four worst-performing markets for the month were all in Europe — Spain, down 3% in local currency and 5.1% in dollars; Norway, down 3.8% in local currency and 6.5% in dollars; Finland, down 4.5% in local currency and 5.6% in dollars; and Sweden, down 4.9% in local currency and 6.2% in dollars.

Far Eastern markets were up 2.3% in dollar terms for the month, largely because of the yen's rebound; the markets were down 0.4% in local currency terms.



PEOPLE

Bonding sets ties to new employer

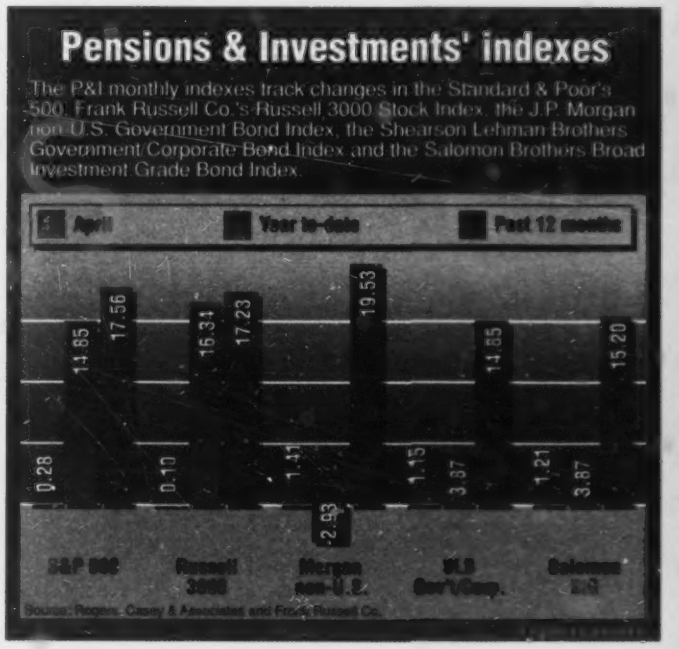
■ International investment marketer Karin Bonding sees the future of the business trending toward the quantitative — so that's where she's directed her career.

Ms. Bonding has joined the quant-oriented PanAgora Asset Management, Boston, to head international product sales. She will move to Boston from London, where she had been assistant director of marketing and client servicing for Lombard Odier Holdings Ltd. for five years.

A few months ago, her job had been cut by Lombard Odier's downsizing program; after that happened, it was a matter of taking the time to find the right job, not just any job, she said.

She settled on PanAgora because of their investment approach: "For the '90s, I believe that more quantitatively oriented management firms will be more successful in gaining new business."

Ms. Bonding, whose position represents an expansion for PanAgora, will be a liaison with pension fund consultants and will be responsible for PanAgora's overall marketing plan for international investment strategies.



LITIGATION

Court recalculates Grace penalty

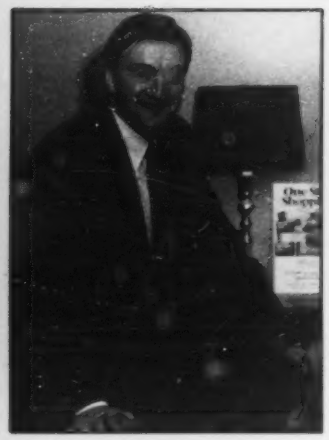
■ Grace Capital Inc. and its chief executive officer, H. David Grace, must pay the Fur Manufacturing Industry Retirement Fund about $1.4 million in damages for violating the fund's investment guidelines.

The U.S. District Court for the Southern District of New York brought the 5-year-old litigation to a close by recalculating the damage figure. Grace had challenged a $1.5 million damage figure awarded in September 1989.

The court had found that Grace had exceeded the fund's 50% equity ceiling by an average of nearly 20 percentage points during a 16-month period in 1983 and 1984. The fund lost $4.3 million plus another $355,000 by the time the account was liquidated.

MONEY MANAGERS

Horn hopes Freedom helps his pursuit of happiness



B. Horn

■ Money manager Bernard Horn and Freedom Capital Management Corp. have made a mutually beneficial match.

Mr. Horn, in merging his small international/global equity firm with Freedom Capital, Boston, is gaining the resources of a large organization; Freedom Capital is gaining Mr. Horn's international investment expertise.

Mr. Horn said he has been frustrated to see his firm, Horn & Co., make it to the finals in manager searches only to lose to larger firms. The Cambridge, Mass., firm has $15 million under management, of which $5 million is tax exempt. It was an early entrant into foreign investing. When it was founded in 1980, there were fewer than 30 U.S. firms offering international; today, there are more than 160.

Freedom Capital has not run international or global separate accounts to date, although it has global equity, bond and short-term mutual funds. Mr. Horn, as a vice president of Freedom Capital, will run international/global equities in separate accounts and consult to the global equity mutual fund managers. Freedom Capital has $3.5 billion under management, of which $2.6 billion is in mutual funds; of the $900 million in separate accounts, about $500 million is tax exempt.

Horn & Co.'s clients will become clients of Freedom Capital, and two other Horn & Co. professionals — Kristin J. Weisker and Khaijan I. Ratulangie — will become international equity analysts at Freedom Capital.

PEOPLE

Hopkins signs on with Kemper unit

■ Paul C. Hopkins joined Kemper Investment Management Co. Ltd., London, as managing director and head of international equities, a new position.

Mr. Hopkins previously headed the European equities team and was responsible for asset allocation at Bankers Trust Investment Management Ltd., London.

Bankers Trust Investment Management is in a search for a chief investment officer, a new position; the chief investment officer likely will take over these responsibilities as well, said Jonathan Lubran, managing director.

Kemper Investment Management manages $664 million; it has no U.S. tax-exempt clients yet.

P. Hopkins

WASHINGTON

IRS selects 11 cases to test waters

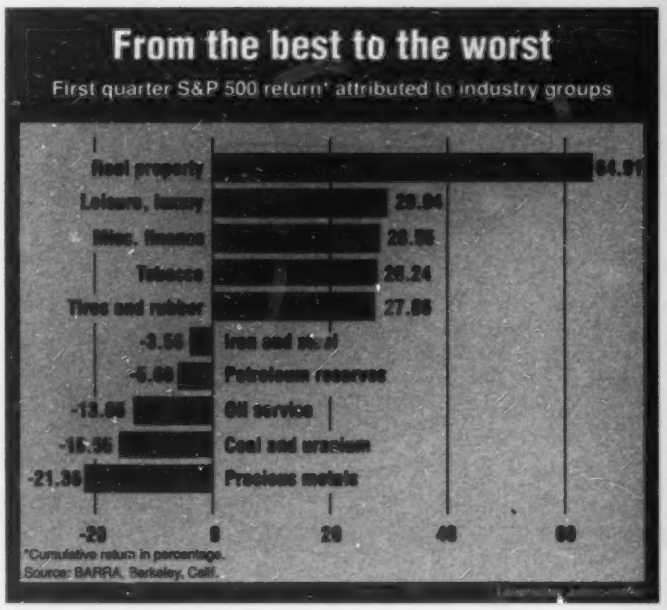
■ The Internal Revenue Service is litigating 11 key cases to test its authority to set actuarial assumptions and methodologies for pension plans.

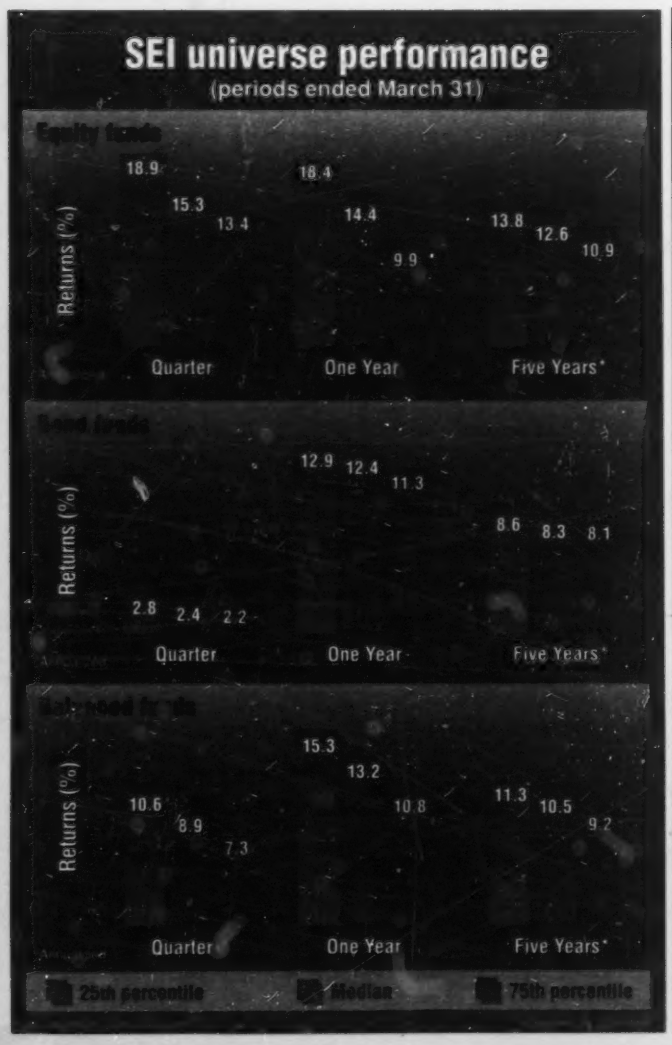
The IRS' actuarial litigation project stems from its small-plan audit program. That program was designed to audit about 18,000 plans with five or fewer participants for making excessive contributions between 1986 and 1988. Now, however, the IRS has scaled back its effort to examining less than 12,000 after it "found fewer cases of abuse than originally anticipated," John Burke, IRS assistant commissioner for employee plans and exemption organizations, wrote in an April 3 letter to Rep. Nancy Johnson, R-Conn.

Differences between the IRS and actuaries over funding assumptions will be sorted out in the test cases. The basic issues stem from an IRS memo ordering agents to challenge retirement assumptions below age 65 and interest rate assumptions less than 8%. The court also will scrutinize IRS challenges to the use of the unit credit funding method.

Two cases involving law firms — Vinson & Elkins and Wachtell, Lipton, Rosen & Katz — will be heard Jan. 6 in the U.S. Tax Court, while nine other cases have been consolidated and will be argued Feb. 3.

That process, however, might drag on for two to three years, as cases go through argument and appeal stages, said Chester Salkind, executive director of the American Society of Pension Actuaries. In the meantime, the IRS is looking to settle with plan sponsors, Mr. Burke wrote.





SOFTWARE

Package assists global operations

■ Five multinational corporations are using a new software package to manage their international treasury operations.

Halliburton Co., Hoffmann-LaRoche Inc., WPP Group Ltd., Axel Johnson Inc. and I.M.S. International Inc. are using Treasury Control, developed by IMRS Inc., Stamford, Conn.

Betsy Cormany, director of treasury products at IMRS, said the software is designed to be used for global balance reporting in multiple currencies, short-term portfolio management, lending between headquarters and subsidiaries, credit management and bank relationship management. It also supports foreign exchange hedging in cross-currency rates.

Such functions previously were available only through proprietary bank software, she said.

The system, which runs on networked PCs, provides automated data collection of treasury and banking operations, then is consolidated for management analysis and reporting.

"The system helps treasurers to better identify and minimize risk and to analyze sources and uses of funds in order to maximize return on investments and reduce costs of funds," Ms. Cormany said.

Manual entry of financial data from subsidiaries is eliminated because international locations and headquarters are connected on a real-time basis, she said.

The headquarters site license for Treasury Control is $65,000.

CASH MANAGEMENT

Fed pushes short-term rates lower

■ The median short-term manager's portfolio returned 7.25% during the first quarter as Federal Reserve actions pressed short-term interest rates down sharply, a Yanni-Bilkey survey shows.

Three months earlier, the median manager in the Yanni-Bilkey short-term CA$H universe returned 8.12%.

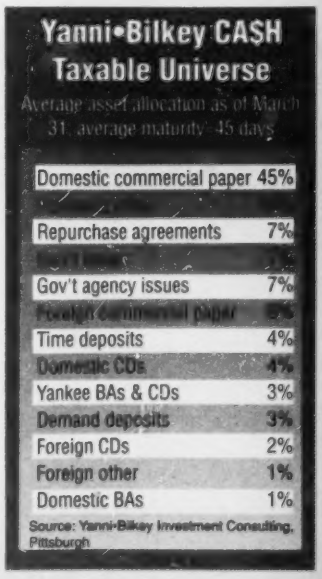
Managers in the survey increased the average maturity in their portfolios to 45 days, from 44 at the end of the year.

Top-performing managers, however, decreased their average maturity to 54 days from 66. (Their returns dropped to 7.66% at the end of the quarter from 8.45%.) "This material decrease in average maturity is indicative of a more defensive posture," said Bob Beck, director of institutional marketing at Yanni-Bilkey. "There seems to be mixed signals about any additional easing by the Federal Reserve."

First-quarter results coincided with an announcement by Yanni-Bilkey that it has completed several enhancements of its short-term portfolio analysis system.

The CA$H data base now covers assets of more than $200 billion managed in 240 funds by about 125 short-term asset managers, more than double the initial data base when it was launched two years ago. The CA$H system also generates reports on the data base for the trailing one- and three-month periods, year to date and one-, four- and five-year periods.

The CA$H system provides information on managers by style, asset quality, investment types and maturity schedule.



Returning to the limelight

Bank, small-cap stocks flourish during the 1st quarter

By Sabine Schramm

Bank and small-capitalization growth stocks surged in the first quarter, posting impressive gains for commingled equity funds while the bond market remained flat.

Bank stocks, a bargain at the end of 1990, snapped back after a year of uncertainty. "They were so beat up last year," said Robert Fenwick, vice president of investments at the Second National Bank, Warren, Ohio. "They got so cheap, we had some going and bought some more. They helped performance tremendously," he said, noting all banks were up nicely, some as much as 50%.

After seven years of underperformance, small-cap stocks experienced a six-month resurgence relative to the Standard & Poor's 500 Stock Index. The S&P returned 24.8% for the six months ended March 31, compared with a 36.2% increase for the Russell 2000.

"The trend for small-cap stocks will continue," said Art Samberg, president of Dawson-Samberg Capital Management, Southport, Conn., and general partner of Pequot Partners Fund L.P., which manages the Growth Pequot Partners Fund. Mr. Samberg said the trends that promoted big company growth in the '80s have been reversed.

Sparked by last year's fourth quarter rally, the average equity fund posted a solid gain for the quarter ended March 31. Insurance company and bank commingled equity funds in the Pensions & Investments' Performance Evaluation Report universe showed a median return of 14.7% for the quarter and 14.28% for the year. The median investment counselor in the PIPER+ equity universe returned 16.87% for the quarter and 14.23% for the year.

The S&P 500 returned 14.53% for the first quarter and 14.44% for the year ended March 31.

With a relatively inactive bond market, PIPER+ median commingled fixed-income accounts returned 2.56% for the quarter and 12.22% for the year, while the Shearson Lehman Brothers Government/Corporate Bond Index returns nearly at the same level during the quarter and year with 2.69% and 12.5%, respectively.

The PIPER and PIPER+ reports are compiled by Rogers Casey & Associates, Darien, Conn.

Equity leaders among PIPER commingled equity accounts for the quarter were Provident Mutual Life Insurance Co.'s Separate Account 7, with a return of 31.67%; Second National Bank's Employee Benefits Fund, 31.09%; and Wells Fargo-Nikko Investment Advisors' Micro Cap Market Fund, 30.97%.

Among PIPER+ leaders were Dawson-Samberg Capital Management's Growth Pequot Partners Fund, with a return of 50.9%; Montgomery Asset Management's Small Cap Growth Fund, 40.14%; and Equitable Capital Management Corp.'s Special Growth Fund, 39.26%.

PIPER fixed-income funds leading the quarter were Connecticut Mutual Life Insurance Co.'s Dimension Fund, with a 14.1% return; Keystone Investment Management's Key Convertibles Fund, 12.56%; and Connecticut Mutual's Convertible Securities Fund, 11.20%.

In the PIPER+ universe, W.R. Huff Asset Management's fixed-income account was the top performer for the quarter with a 19.6% return, followed by Houlihan, Lokey, Howard & Zukin Investment Management's Quantitative Fund I, 18.36% and Bell Capital Management Inc.'s Managed Bond Fund, 14.7%.

The market rally for small-cap stocks began in the fourth quarter of 1990, but bank stocks suffered badly from economic trends and lack of public confidence through the end of the year. Though not in the same situation as savings and loans, banks felt the effects of high interest rates, the downturn in the real estate market and bank failures.

Banks have started up from a low point, said Mr. Fenwick, who manages Second National Bank's equity, growth and fixed-income funds that are included in the PIPER universe. "We loaded up on them at the right time."

Among the bank stocks held by the fund are **Ameritrust Corp., Barnett Banks Trust Co., First Fidelity Bancorp** ... d **C&S/Sovran.**

Second National's equity account also holds big-name growth stocks such as **Corning Inc.** and **General Electric Co.**, intermixed with cyclicals.

Small-cap growth managers, who performed best for the quarter, looked for unique situations in small companies that had not been recognized by the market.

Dawson-Samberg's Growth Pequot Partners fund is a hedge fund. Of the stocks it handles, 75% have a market capitalization of $500,000 or less. The fund looks for turnaround growth emerging companies and early-stage pre-emerging growth stocks or "companies the market has given up on," said Mr. Samberg.

Both Montgomery Asset Management's Small Cap Growth fund and Equitable Capital's Special Growth fund had strong exposures to health care and biotech stocks. ■

PIPER+ fixed-income funds

Periods ended March 31

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First quartile	2.98	13.09	10.20	9.17	13.90
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Third quartile	2.16	11.12	9.10	8.20	12.59
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SLB G/C	2.69	12.50	9.68	8.29	13.02

PIPER+ equity funds

Periods ended March 31

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First quartile	22.22	20.51	19.18	14.82	18.07
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Third quartile	13.86	10.12	13.28	10.76	15.01
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S&P 500	14.53	14.44	17.21	13.25	15.34

PIPER+ special equity funds

Periods ended March 31

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First quartile	21.91	15.03	15.57	12.03	15.45
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Third quartile	10.90	6.34	6.81	6.88	13.13
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S&P 500	14.53	14.44	17.21	13.25	15.34
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PIPER equity funds

Periods ended March 31

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First quartile	17.25	18.57	17.42	13.22	15.88
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Third quartile	12.89	10.33	13.66	10.38	13.49
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S&P 500	14.53	14.44	17.21	13.25	15.34

PIPER special equity funds

Periods ended March 31

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First quartile	30.49	25.63	19.26	13.42	16.35
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Third quartile	19.61	6.86	10.90	8.11	11.82
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S&P 500	14.53	14.44	17.21	13.25	15.34
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Environmentalists at root of funds' success

By Steve Hemmerick

Environmentalists' efforts to restrict the cutting of America's timberlands has helped propel two commingled timberland investment funds to the peak of the real estate performance charts and to magnify pension fund interest in timber.

John Hancock Timber Resource Group's ForesTree I fund, a closed-end fund, racked up a 15.5% total return for the year ended Dec. 31.

That return was more than nine times greater than the 1.65% median total return for closed-end commingled real estate funds in that period.

Meanwhile, John Hancock's Separate Accounts open-end fund returned 12.8% for 1990, seven times as great as the open-end median total return of 1.8% for the same period.

Both commingled funds scored the highest total returns in their respective categories for 1990.

What is happening to timberland is just the reverse of what has happened to most commercial real estate: The supply — in this case of timber tracts available for cutting — is dwindling while demand is holding steady.

Timber cutters have depended upon vast public lands in the Pacific Northwest for supplies of timber in addition to privately owned forests, said Scott Jones, a manager of forest operations with Boston-based John Hancock.

But environmentalists worried about the possible extinction of the spotted owl and America's supply of wilderness have been successfully pressuring state and federal agencies to shut off supples of publicly owned timber to woodcutters.

The declining supply of timber has closed wood mills and thrown hundreds of woodcutters out of work, but, said Mr. Jones, it has made forests in the hands of private interests more valuable.

Just as environmentalists score victory after victory over timber cutters and shrink the supply of available timber for cutting, institutional investors have intensified their interest in timber investments.

Although investors have reduced their interest in real estate in general because of poor returns, John Hancock signed up a $50 million direct separate account with an institutional investor in 1990 for investment in timber, and John Hancock is just about to close its second closed-end timber fund, ForesTree II, with $100 million to buy more timberland.

Many other investors, not yet putting up money, are studying timber investments, said Mr. Jones.

The $17 million ForesTree I and the $875 million John Hancock Separate Accounts fund both invested in timber in the Pacific Northwest and the Southeast.

The second best performing closed-end fund was INVESCO Realty Advisors' Institutional Mortgage Fund II. The $25 million fund returned 14.7% for 1990.

David Ridley, a principal with Dallas-based INVESCO, said the high return resulted from increases in value and higher rents on properties for which the INVESCO fund has participating mortgages. Most of those properties are in Florida, Texas, Rhode Island, Missouri and Tennessee.

Equitable Real Estate Investment Management's HPFI fund had the third best performance for 1990 among closed-end funds. It had a total return of 10.4%.

The $371 million fund invests in a regional mall and office buildings, primarily in Hawaii. "Hawaii is one of the best office markets right now," said Jonathan Miller, a vice president with Equitable Real Estate, New York.

The Aldrich, Eastman & Waltch/State Street Real Estate I fund of State Street Bank and Trust Co., Boston, scored the fourth highest total return, 9.7%, and Dallas-based Lehndorff & Babson Real Estate Counsel's Property Fund III, scored the fifth highest total return, 9%, for closed-end funds for 1990.

The second best performing open-end fund for 1990 was Prudential Real Estate Investors' Union Mortgage Account. It scored a 10.3% total return.

The $143 million fund invests in straight mortgages in office, retail and industrial buildings built with union labor, said Scott Peterson, director of public relations for Prudential Real Estate, Newark, N.J.

The buildings in which the fund has investments, said Mr. Peterson, are quality properties that are 90% leased.

The third best open-end fund performance for 1990, 7.3%, came from Washington-based Union Labor Life Insurance Co.'s Mortgage Separate Account J.

Group Trust V of JMB Institutional Realty Corp., Chicago, scored the fourth best total return performance, 6.7%, and JMB's Endowment IV fund scored the fifth best total return, 6.6%, for 1990. ■

Top decile PIPER commingled fixed-income funds

3-month returns

	%
Connecticut Mutual (Dimension)	14.1
Keystone Invst. (Convert.), Pa.	12.6
Connecticut Mutual (Convert.)	11.2
Imperial Trust, Calif.	5.3
PW Trust (Conserv.), N.J.	5.1
Capital Trust, Ore.	4.6
The Phoenix (Mgd.), Conn.	4.6
Indiana Invst.	4.6
Penn Mutual Life (S.A. C), Pa.	4.6
Sunburst Bank, Miss.	4.6
Northern Trust, Ill.	4.2
First Nat'l of Amarillo, Texas	4.2
Security Nat'l (II), W. Va.	4.0
Life of Virginia	3.9
Wheeling Dollar Bank, W. Va.	3.9
Lake Shore Nat'l, Ill.	3.9
Beverly Trust, Ill.	3.9
NBD Trust, Ill.	3.8
Transamerica (S.A. T2), Calif.	3.7
Cullen Bank, Texas	3.6
Union Central, Ohio	3.5
Puget Sound Nat'l, Wash.	3.5
Aetna Life (Inc. shares), Conn.	3.5
Sovran Capital, Va.	3.5
Provident Capital, Pa.	3.4
Comerica, Mich.	3.4
Mutual of New York (Public)	3.3
Princeton Bank, N.J.	3.2
SLB G/C	**2.7**

1-year returns

	%
Life of Virginia	15.2
Lincoln Nat'l (Long), Ind.	15.0
Commerce Bank, Mo.	15.0
PW Trust (Conserv.), N.J.	14.9
Connecticut Nat'l	14.9
NCNB Texas (MBS)	14.6
Boatmen's Trust (F), Mo.	14.4
Morgan Guaranty, N.Y.	14.4
Ameritrust (RT GNMA), Ohio	14.2
U.S. Trust Co. of New York	14.1
Chase-CMB (Sec. mtg.), N.Y.	14.0
Penn Mutual Life (S.A. C), Pa.	13.8
J.P. Morgan (Tactical dur.), N.Y.	13.8
Transamerica (S.A. 13.8), Calif.	13.8
New York Life (S.A. 4)	13.6
Aetna Life (In. shares), Conn.	13.5
Wellington Trust (Enhan.), Mass.	13.5
Metropolitan Life (S.A. 41), N.Y.	13.5
Nat'l Bank of Detroit	13.4
Northern Trust, Ill.	13.3
Shawmut Bank, Mass.	13.3
Comerica, Mich.	13.3
First Nat'l of Maryland	13.3
IAA Trust (B), Ill.	13.2
Fidelity Bank, Pa.	13.1
NCNB Nat'l, N.C.	13.1
Continental Capital, Ill.	13.1
SLB G/C	**12.5**

5-year returns

	%
Transamerica (S.A. T2), Calif.	11.2
Meridian, Pa.	11.1
General American (S.A. 6), Mo.	10.3
Mutual of New York (Priv. place.)	10.0
Bankers Trust (Mtg. pass.)	10.0
Morgan Guaranty, N.Y.	9.9
General American (S.A. 9), Mo.	9.9
First Nat'l of Amarillo, Texas	9.8
Beverly Trust, Ill.	9.8
Sanwa Bank (C), Calif.	9.8
Aetna Life (Inc. shares), Conn.	9.7
IAA Trust (B), Ill.	9.6
Pacific Financial, Calif.	9.5
Mercantile Safe, Md.	9.5
The Principal, Iowa	9.5
Trust Services of America, Calif.	9.4
Marinvest, N.Y.	9.4
Keystone Invst., Pa.	9.4
Harris Trust, Ill.	9.3
Cullen Bank, Texas	9.3
First Interstate (Mgd.), Calif.	9.3
First Nat'l of Maryland	9.3
Connecticut Nat'l Bank	9.3
Trustmark Nat'l, Miss.	9.3
LaSalle Nat'l (Gov't/mtg.), Ill.	9.2
IDS Trust (Pooled GIC)	9.2
SLB G/C	**8.3**

10-year returns

	%
Transamerica (S.A. T2), Calif.	16.5
Meridian, Pa.	15.6
United Capital, Colo.	15.2
Boatmen's Trust (F), Mo.	14.9
IAA Trust (B), Ill.	14.7
Life of Virginia	14.5
First Kentucky Trust	14.4
Mutual of New York (Priv. place.)	14.3
Sovran Capital, Va.	14.3
Beverly Trust, Ill.	14.3
Connecticut Nat'l Bank	14.3
Pacific Financial, Calif.	14.3
Trust Services of America, Calif.	14.2
Sanwa Bank (C), Calif.	14.2
ASB Capital, D.C.	14.1
First Nat'l of Amarillo, Texas	14.1
Society Nat'l, Ohio	13.9
SLB G/C	**13.0**

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Top decile PIPER commingled equity funds

3-month returns

	%
Provident Mutual (S.A. 7), Pa.	31.7
Second Nat'l Bank, Ohio	31.1
Wells Fargo (Micro cap.), Calif.	31.0
Bankers Trust (Russell 2000)	29.6
Travelers Cos. (S.A. 2000), Conn.	29.6
Pacific Financial (Sm. cap.)	29.5
Merus Capital (Sp. growth), Calif.	20.2
Union Central, Ohio	26.8
New York Life (S.A. 1)	26.7
Bank of the West, Calif.	26.3
Chancellor (Styleshift), N.Y.	25.9
Norwest Bank, Minn.	25.2
Union Nat'l-Arkansas (Low p/e)	25.1
Chancellor (Growth), N.Y.	24.6
Chancellor (Multifact), N.Y.	24.4
IDS Trust (Core growth), Minn.	24.0
Pacific Financial (Cap. app.)	24.0
Midco Investors, N.J.	23.9
Sunburst Bank, Miss.	23.5
Chancellor (Select growth), N.Y.	23.5
State Street (Matrix syn./CM9)	23.3
Wilmington Trust (Growth), Del.	23.1
Equitable Capital (No. 4), N.Y.	22.8
First Trust, Colo.	22.8
The Phoenix (Growth S), Conn.	22.3
Southeast Bank, Fla.	21.9
Wells Fargo (Ext. mkt.), Calif.	21.9
First Wisconsin Asset (Growth A)	21.7
Pacific Financial (Income)	21.6
Shearson Trust (EF6), Del.	21.3
Pacific Financial (Low p/e)	20.4
Shearson Trust (EF7), Del.	20.4
S&P 500	**14.5**

1-year returns

	%
Chancellor (Growth), N.Y.	36.7
Chancellor (Select growth), N.Y.	34.4
Provident Mutual (S.A. 7), Pa.	33.7
Norwest Bank, Minn.	32.2
New York Life (S.A. 1)	30.8
Bank of the West, Calif.	30.7
Fifth Third Bank-Toledo, Ohio	29.7
Chancellor (Styleshift), N.Y.	28.7
American National Bank, Ind.	28.5
Commerce Bank, Mo.	28.1
The Phoenix (Growth S), Conn.	28.1
The New England (Cap. growth)	27.4
First Wisconsin Asset (Growth A)	26.9
Sentry Equity (S.A. B), Wis.	26.5
Merus Capital (Sp. growth), Calif.	26.3
Manufacturers Detroit (E)	26.2
Manufacturers Affiliate (Gro.), Ill.	25.8
Shearson Trust (EF7), Del.	24.8
Mark Twain Bank, Mo.	24.6
Liberty Nat'l, Okla.	24.5
Penn Mutual (S.A. A), Pa.	24.5
Aetna Life (S.A. 2), Conn.	24.4
CoreStates (Growth), Pa.	24.1
NBD Trust, Ill.	23.3
First Illinois (Corp.)	23.1
IDS Trust (Core growth), Minn.	23.1
Citizens Fidelity (E), Ky.	22.7
Southeast Bank, Fla.	22.5
Norwest Bank (Growth), Minn.	22.4
Sanwa Bank (D), Calif.	22.4
Texas Commerce (Growth)	22.4
Chancellor (Indexplus), N.Y.	22.3
S&P 500	**14.4**

5-year returns

	%
Chancellor (Select growth), N.Y.	19.7
Pacific Financial (Sm. cap.)	19.6
The Phoenix (Growth S), Conn.	19.3

IDS Trust (Core growth), Minn.	18.7
State Street (Matrix syn./CM9)	18.3
Sun Bank, Fla.	18.1
Shearson Trust (EF7), Del.	17.6
Chancellor (Growth), N.Y.	17.4
Lincoln Nat'l (Select), Ind.	16.5
First Nat'l Amarillo, Texas	16.2
Mark Twain Bank, Mo.	16.1
Wheeling Dollar Bank (B), W. Va.	15.8
NCNB Nat'l (Growth), N.C.	15.7
Pacific Financial (Cap. app.)	15.6
Meridian, Pa.	15.6
Pacific Financial (Income)	15.4
Bank One-Indianapolis (L)	15.4
Chancellor (Styleshift), N.Y.	15.4
The Phoenix, Conn.	15.1
South Carolina Nat'l	15.1
First Illinois (Corp.)	15.0
Assoc. Manitowoc, Wis.	14.9
Bank of New York Invst.	14.9
Chancellor (Indexplus), N.Y.	14.9
Southtrust Bank, Ala.	14.9
Bank One Wis. Trust (Growth)	14.8
U.S. Nat'l Bank, Texas	14.7
S&P 500	**13.3**

10-year returns

	%
Sun Bank, Fla.	23.8
Pacific Financial (Cap. app.)	21.4
First Nat'l Amarillo, Texas	18.5
First Union Nat'l, N.C.	18.3
Provident Mutual (S.A. 1), Pa.	18.2
U.S. Nat'l Bank, Texas	18.0
Manufacturers Detroit (E)	17.9
Nationwide Life, Ohio	17.9
Manufacturers Affiliate (Gro.), Ill.	17.9
Merus Capital (Income), Calif.	17.9
First Fidelity (Sel. value), N.J.	17.6
Wheeling Dollar Bank (B), W. Va.	17.6
Merus Capital (Gro. plus), Calif.	17.4
First NH Invst. (Value)	17.3
First Security Nat'l (D), Ky.	17.3
Chancellor (Growth), N.Y.	17.3
The New England (Sep. cap. gro.)	17.2
Markston Invst. (Lt. gro.), N.Y.	17.2
Manufacturers Life, Ontario	17.1
Aliac (Variable), Conn.	17.1
S&P 500	**15.3**

Top decile PIPER commingled special equity funds

3-month returns

	%
Chancellor (Em. health), N.Y.	42.9
Texas Commerce	39.8
Equitable Capital (Growth 3), N.Y.	39.3
General American (S.A. 20), Mo.	35.4
Bankers Trust (Cap. app.), N.Y.	34.0
Puget Sound (WIN), Wash.	33.4
PW Trust (Agg.), N.J.	33.2
Meridian (Quest), Pa.	33.1
Russell 2000	**29.7**
S&P 500	**14.5**

1-year returns

	%
Chancellor (Em. health), N.Y.	78.6
Equitable Capital (Growth 3), N.Y.	49.6
PW Trust (Agg.), N.J.	41.8
Princeton Bank (Em. gro.), N.J.	38.5
Bankers Trust (Cap. app.), N.Y.	36.9
Equitable Capital (Convert.), N.Y.	36.5
First Wis. Asset (Em. gro. C)	36.5
Norwest Bank, Minn.	34.7
S&P 500	**14.4**
Russell 2000	**6.8**

5-year returns

	%
Chancellor (Em. health), N.Y.	18.2
Shearson Trust (EF2), Del.	17.8
Putnam Cos. (Spec. gro.), Mass.	17.0
Norwest Bank, Minn.	16.6
Connecticut Nat'l Bank	16.1
Shearson Trust (EF5), Del.	16.0
Meridian (Quest), Pa.	15.5
S&P 500	**13.3**
Russell 2000	**5.1**

10-year returns

	%
Connecticut Nat'l Bank	18.8
Norwest Bank, Minn.	18.7
Chase-CMB (Med. cap.), N.Y.	17.7
S&P 500	**15.3**
Russell 2000	**10.4**

Top half PIPER commingled international funds

3-month returns

	%
Boatmen's Trust (Eq. W), Mo.	14.1
Wellington Trust (Pacific Basin)	12.9
CIGNA Corp. (Eq.), Conn.	11.6
CL Capital (Stock), Ga.	10.2
FTA World	**10.2**
Assoc. Bank-Neenah (World)	10.2
MSCI World	**10.0**
The Principal (Stock), Iowa	9.2
Wellington Trust (Stock)	9.2
Citibank Invst. (Eq.), N.Y.	9.2
Wilmington Trust (Eq.), Del.	9.2
Trust Co./West (Global), Calif.	9.2
Harris Trust (Eq.), Ill.	8.4
Connecticut Mutual (Overseas)	8.3
Provident Capital (Low p/e), Pa.	8.2
Chase-CMB (EAFE), N.Y.	7.6
Putnam Cos. (Eq.), Mass.	7.6
FTA Europe & Pacific	**7.6**
MSCI EAFE	**7.5**
Morgan Guaranty (Eq.), N.Y.	7.5
Lincoln Nat'l (S.A. 22), Ind.	7.5
Wells Fargo (Eq. index), Calif.	7.2
Travelers Cos. (TIIF), Conn.	7.2
Bankers Trust (EAFE), N.Y.	7.1
First NH Invst.-Bank Ireland (Eq.)	7.0
Wellington Trust (Em. co.)	6.8

1-year returns

	%
Chase-CMB (Fixed), N.Y.	27.8
Morgan Guaranty (Bond), N.Y.	21.3
Citibank Invst. (Fixed), N.Y.	20.2
Ameritrust Texas (Bond)	18.9
Global Fixed Income (Bond)	18.6
Global Fixed Income (Glo. bond)	17.3
Trust Co./West (Global), Calif.	14.8
Boatmen's Trust (Eq. W), Mo.	13.3
CIGNA Corp. (Eq.), Conn.	10.2
Global Fixed Income (Glo. yield)	9.7
Provident Capital (Low p/e), Pa.	8.2
Connecticut Mutual (Overseas)	7.8
MSCI World	**7.0**
CL Capital (Stock), Ga.	7.0
FTA World	**6.6**
Morgan Guaranty (Eq.), N.Y.	6.5
IAA Trust (CTF/I), Ill.	6.2
Wellington Trust (Pacific Basin)	5.3
Citibank Invst. (Eq.), N.Y.	4.8
Lincoln Nat'l (S.A. 22), Ind.	4.7
Putnam Cos. (Eq.), Mass.	4.7
U.S. Trust, N.Y.	4.3
NCNB Nat'l (Eq.), N.C.	3.8
The Principal (Stock), Iowa	3.2
MSCI EAFE	**2.9**
FTA Europe & Pacific	**2.3**

5-year returns

	%
CIGNA Corp. (Eq.), Conn.	21.0
Provident Capital (Low p/e), Pa.	19.2
CL Capital (Stock), Ga.	18.8
Wellington Trust (Pacific Basin)	16.8
Global Fixed Income (Glo. bond)	16.3
Lincoln Nat'l (S.A. 22), Ind.	16.0
Bankers Trust (Eq.), N.Y.	15.4
U.S. Trust, N.Y.	15.2
NCNB Nat'l (Eq.), N.C.	15.2
Chase-CMB (Fixed), N.Y.	14.8
FTA Europe & Pacific	**14.2**
Wellington Trust (Stock)	14.2
Wells Fargo (Eq. index), Calif.	14.1
Travelers Cos. (S.A. W), Conn.	14.1
Chase-CMB (EAFE), N.Y.	14.0
MSCI EAFE	**14.0**
Morgan Guaranty (Bond), N.Y.	13.5
FTA World	**13.0**
MSCI World	**12.8**

10-year returns

	%
Bankers Trust (Eq.), N.Y.	18.4
Putnam Cos. (Eq.), Mass.	18.0
MSCI EAFE	**17.7**
FTA Europe & Pacific	**17.4**
U.S. Trust, N.Y.	16.3
MSCI World	**15.9**
Citibank Invst. (Eq.), N.Y.	15.1
FTA World	**13.9**

Investment management consultant profiles will run Nov. 11.

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Top decile PIPER+ fixed-income funds

3-month returns

	%
Huff Asset	19.6
Houlihan Lokey Howard (Q. I)	18.4
Bell Capital (Mgd.)	14.7
Loomis, Sayles (Disc.)	12.3
Scheetz, Smith	11.6
Pension Mgmt.	10.5
Perpetual Advisory (Stamp)	7.4
Kemper Asset	5.8
Bartlett & Co. (Act./value)	5.2
Washington Square (Broad)	5.0
Executive Invst.	4.9
First Pacific (Interm.)	4.7
Davis, Hamilton (Interm.)	4.5
Loomis, Sayles (Invst. grade)	4.3
Loomis, Sayles	4.3
Bradford & Marzec (Full qual. disc.)	4.1
Legg Mason Capital (Act.)	4.0
Fayez Sarofim	3.9
Independence One (PRIMA VII)	3.7
Standish, Ayer & Wood (Act. core)	3.7
Miller Anderson Sherrerd	3.6
Capital Guardian	3.6
Durkee Capital (Act. quant.)	3.6
Tom Johnson Invst.	3.6
McKee Invst.	3.5
SLB G/C	**2.7**

1-year returns

	%
Perpetual Advisory (Stamp)	37.0
Bell Capital (Mgd.)	24.7
Huff Asset	17.8
Davis Hamilton (Interm.)	16.0
Durkee Capital (Act. quant.)	15.5
Criterion Invst. (Mort.)	14.8
Income Research (Long dur.)	14.7
Criterion Invst. (Long)	14.6
Furman Selz Capital	14.6
Kemper Asset (Plus)	14.6
Atlantic Port. Analytics (A)	14.4
Capital Guardian	14.4
Miller Anderson Sherrerd (Mort.)	14.3
Security Capital (En. I-t ind.)	14.3
McCowan Assoc.	14.2
Brinson Partners (U.S.)	14.2
Gardner Preston Moss (Rel. ret.)	14.2
NWQ Invst.	14.1
Legg Mason Capital (Act.)	14.1
Criterion Invst. (Disc./total ret.)	14.1
Turner Neill Invst. (Core)	14.1
Peters, Gamm, West & Vincent	14.0
Scudder Stevens Clark (Act. val.)	14.0
Miller Anderson Sherrerd	14.0
Pension Mgmt.	13.9
SLB G/C	**12.5**

5-year returns

	%
Huff Asset	12.8
Fox Asset	12.1
Bell Capital (Mgd.)	11.7
McKee Invst.	11.3
Bartlett & Co. (Act. value)	11.2
Meridian Invst.	11.1
Capstone Asset	10.7
Executive Invst.	10.5
Durkee Capital (Act. quant.)	10.4
Analytic Invst. (Plus)	10.1
Dolan Capital	10.0
Ferguson & Wellman (Rate antic.)	10.0
Philadelphia Invst.	9.9
Hoisington Invst.	9.9
U.S. Trust of California	9.8
Miller Anderson Sherrerd (Mort.)	9.8
Washington Square (Broad)	9.8
Brinson Partners (U.S.)	9.8
Bridgewater Asset (Act. dur.)	9.8
Strong/Corneliuson Capital	9.8
SLB G/C	**8.3**

10-year returns

	%
Bridgewater Asset (Act. dur.)	19.5
Huff Asset	16.6
Smith Affiliated	16.2
STW Fixed Income (Long co.)	16.1
Consistent Asset (Total ret.)	15.9
Miller Anderson Sherrerd (Mort.)	15.6
Meridian Invst.	15.6
Independence One (PRIMA X)	15.3
Wolf Webb Burk Campbell	15.2
Miller Anderson Sherrerd	15.1
Loomis, Sayles (Disc.)	15.0
Dolan Capital	15.0
Standish, Ayer & Wood (Act. core)	14.9
Greenwich Asset	14.9
SLB G/C	**13.0**

Top decile PIPER+ equity funds

3-month returns

	%
Dawson Samberg (Gro. Pequot)	50.9
Montgomery Asset (Sm. cap. gro.)	40.1
Equitable Capital (Sp. growth)	39.3
Mt. Auburn Mgmt. (Concen.)	38.7
Chilmark Capital (L.P.)	38.6
Duncan-Hurst (Sm. cap. gro.)	37.1
First Pacific (Capital)	37.0
Friess Assoc.	34.3
Wasatch Advisors	33.8
Insight Capital (Sm. cap.)	33.5
Qualivest Capital (Agg.)	33.5
Pacific Cent. (Em. gro./sm. cap.)	32.9
R.B. Haave Assoc.	32.5
Pacific Century (Growth)	32.2
Beekman Capital (Growth)	32.1
Nicholas-Applegate (Em. gro.)	32.0
Miller Anderson (Sm. cap.)	31.9
Wilshire As[illegible]m. co. gro.)	31.4
Scudder Ste[illegible]ns Clark (Sm. co.)	31.1
Pilgrim, Baxter, Greig (Sm. cap.)	31.1
Peregrine Capital (Sm. cap.)	30.6
Oak Assoc. (Firestone)	30.1
Granahan Invst. (Explorer II)	30.0
American Capital	30.0
Mellon Capital (MR 2000 sm.)	29.9
Cadence Capital (Sm. cap.)	29.8
Morgan Stanley Asset (Em. gro.)	29.8
Fidelity Mgmt. (Sel. sm. cap.)	29.2
Capital Growth Mgmt.	29.1
Frontier Capital (Sm. cap.)	29.1
Value Line (Sm. cap.)	29.1
Chase Investors (Sm. cap. value)	29.1
Jundt Assoc. (Sm. cap.)	29.0
GeoCapital (Sm. cap.)	29.0
McCowan Assoc. (Sp.)	28.9
Fred Alger Mgmt.	28.9
Harris Bretall Sullivan & Smith	28.9
Investors Res. (20th Cent. Gro.)	28.8
Hellman, Jordan	28.7
Standish, Ayer & Wood (Sm. cap.)	28.7
Dimensional (SCF BKTST-9/10)	28.7
Brandywine (Low p/e II/sm. cap.)	28.6
Keeley Asset (Sp. sit.)	28.6
S&P 500	**14.5**

1-year returns

	%
Mt. Auburn Mgmt.(Concen.)	60.3
Duncan-Hurst (Sm. cap. gro.)	52.9
Lehman Ark (Sp. sit.)	49.9
Equitable Capital (Sp. gro.)	49.5
Cheswick Invst.	48.1
Dawson Samberg (Gro. Pequot)	48.1
Jundt Assoc. (Sm. cap.)	44.6
Scudder Stevens Clark (Sm. co.)	41.4
Asset Mgmt. (Tiger)	38.7
Cohen, Davis & Marks	38.2
Morgan Stanley Asset (Em. gro.)	37.9
Capital Growth Mgmt.	37.3
Pacific Century (Growth)	35.8
Wilke/Thompson (Sm. cap. gro.)	35.5
Fred Alger Mgmt.	35.3
Hellman, Jordan (Acct. 25)	34.8
Denver Invst. (Medium)	34.7
Tukman Capital	34.7
Hellman, Jordan Mgmt.	34.4
Harris Bretall Sullivan & Smith	34.2
Hatteras Capital	33.8
Peregrine Capital (Sm. cap.)	33.5
Insight Capital (Sm. cap.)	33.5
Provident Invst.	33.0
Ashland Mgmt.	32.9
Brown Capital (Rel. value)	32.6
Montgomery Asset (Sm. cap. gro.)	32.2
Peregrine Capital (Growth)	32.1
Ashfield & Co.	31.8
Chase Invst.	31.8
Phoenix Mutual (Ind. growth)	31.2
Wilke/Thompson (Growth)	31.2
Fred Alger Mgmt. (Sm. cap.)	30.7
General American (Closed end)	30.1
Investment Advisers (Sm. cap.)	29.9
Wasatch Advisors	29.9
[illegible]:Kay-Shields (Growth)	29.4
Northern Invst.	29.2
IDS Equity (Em. growth)	29.0
Hutson Mgmt. (Growth)	28.9
Severn Assoc. (I)	28.7
Baring America (Growth)	28.5
S&P 500	**14.4**

5-year returns

	%
Mt. Auburn Mgmt. (Concen.)	26.5
Asset Mgmt. (Tiger)	24.4
Duncan-Hurst (Sm. cap. gro.)	24.0
Montgomery Asset (Sm. cap. gro.)	23.6
Kingsly, Jennison, McNulty	23.6
Quantitative Asset (En. index)	23.2
Cheswick Invst.	22.4
Jundt Assoc. (Sm. cap.)	22.3
Oak Assoc. (Firestone)	22.1
Hatteras Capital	21.5
WR Lazard (Growth)	20.0
Tukman Capital	19.9
DeJarnette Invst.	19.3
Turner Neill Invst.	19.2
C.H. Brown (Computer dir.)	19.1
Lehman Ark (Sp. sit.)	19.1
Harris Bretall Sullivan & Smith	19.0
Friess Assoc.	19.0
State Street Asset (Matrix syn.)	19.0
Pension Mgmt.	18.7
J.M. Hartwell & Co.	18.7
Dundee Partners	18.6
Investment Advisers (Sm. cap.)	18.1
Investment Counselors	18.0
Hutson Mgmt. (Growth)	18.0
Pilgrim, Baxter, Greig (Sm. cap.)	18.0
Pacific Cent. (Em. gro./sm. cap.)	17.8
Lincoln Capital	17.5
Institutional Capital	17.5
Brinson Partners	17.3
Fayez Sarofim & Co.	17.3
Peregrine Capital (Sm. cap.)	17.0
Columbus Circle Invst.	20.1
MPI Invst. Mgmt.	20.0
Wagstaff, Lodefink & Assoc.	19.9
S&P 500	**15.3**

Top decile PIPER+ special equity funds

3-month returns

	%
Keeley Asset (KAMCO 1)	43.8
Equitable Capital (Convertibles)	31.6
Russell 2000	**29.7**
Brinson Partners (Post venture)	28.9
Fidelity Mgmt. (Sm. co. gro.)	27.2
Guild Invst.	27.0
S&P 500	**14.5**

1-year returns

	%
Guild Invst.	90.7
Equitable Capital (Convertibles)	36.5

PIPER+ global funds

Periods ended March 31

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First quartile	11.93	6.85	12.92	14.55	18.30
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Third quartile	7.23	0.91	7.88	11.39	14.84
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MSCI World	9.98	7.03	6.08	12.84	15.89
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PIPER+ international funds

Periods ended March 31

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First quartile	9.22	3.43	10.85	13.31	19.30
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Third quartile	6.34	-1.51	5.09	12.51	14.67
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MSCI EAFE	7.52	2.86	0.67	13.95	17.74
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PIPER+ balanced/TAA funds

Periods ended March 31

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First quartile	11.90	16.79	14.47	12.30	16.06
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Third quartile	7.90	11.31	12.02	10.02	13.98
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Ashfield & Co. 17.0
Provident Invst. 17.0
Hellman, Jordan Mgmt. 16.9
Investment Res. (20th Cent. Gro) 16.9
S&P 500 13.3

10-year returns

	%
Asset Mgmt. (Tiger)	35.8
C.H. Brown (Computer dir.)	24.5
Nicolas-Applegate (Em. gro.)	24.4
Severn Assoc. (I)	23.1
Quantitative Asset (En. index)	22.7
Roxbury Capital	22.5
Fox Asset Mgmt.	22.3
Balch Hardy & Scheinman	22.1
GAMCO (ERISA)	22.0
Ashland Mgmt.	21.9
Roger Engemann & Assoc.	21.4
Cadence Capital (Lg. cap.)	21.4
Ashfield & Co.	21.2
Securities Res. (Dreyfus Gro.)	21.0
Investment Counselors	20.9
Capital Growth Mgmt.	20.8
Leylegian Invst.	20.4
Tom Johnson Invst.	20.4
Neuberger and Berman	20.4
Hellman, Jordan Mgmt.	20.4
Caldwell & Or[illegible]	20.3
Systematic Financial (Hi cash flo)	20.1
Axe-Houghton (Em. growth)	33.8
Brinson Partners (Post venture)	27.9
Amerindo U.S. (Em. gro. tech.)	27.8
S&P 500	**14.4**
Russel 2000	**6.8**

5-year returns

	%
Guild Invst.	56.2
NFJ Invst. (Select)	29.4
Amerindo U.S. (Em. gro. tech.)	21.7
Equitable Capital (Convertibles)	15.5
S&P 500	**13.3**
Russell 2000	**5.1**

10-year returns

	%
Guild Invst.	39.7
Amerindo U.S. (Em. gro. tech.)	27.3
S&P 500	**15.3**
Russell 2000	**10.4**

Top half PIPER+ global equity funds

3-month returns

	%
Guild Invst.	26.4
Marvin & Palmer Assoc.	16.3
Clemente Capital	13.4
Martin Currie (A)	13.4
Marathon Asset	12.6
G.T. Capital	12.3
WorldInvest	12.1
Clemente Capital (RCB)	11.9
Brinson Partners (World)	11.9
Putnam Cos.	11.6
RCB Int'l	11.4
Templeton Invst.	11.3
Batterymarch Financial	11.2
Stewart, Ivory (RCB)	11.2
Scudder Stevens & Clark	11.1
Clemente Capital (Freedom)	10.8
Clemente Capital (Growth)	10.7
FTA World	**10.2**
MSCI World	**10.0**

1-year returns

	%
Guild Invst.	29.1
Martin Currie (A)	11.9
Brinson Partners (World)	11.2
IDS Int'l	10.5
Fiduciary Trust	9.8
Marvin & Palmer Assoc.	9.2
Stewart, Ivory (RCB)	8.9
Putnam Cos.	7.0
MSCI World	**7.0**
FTA World	**6.6**
London & Bishopsgate (En. index)	6.3
Henderson Admin.	5.3
Marathon Asset	5.1
Ivory & Sime Int'l (3)	4.7
Edinburgh Wilmington Int'l	4.1
Credit Suisse Asset	3.6
Lombard Odier Int'l	2.5
Scudder Stevens & Clark	2.1
G.T. Capital	2.1

5-year returns

	%
Burgess Capital	20.8
Martin Currie (A)	19.9
Brinson Partners (World)	17.2
Ivory & Sime Int'l (3)	16.8
Stewart, Ivory (RCB)	16.6
Marvin & Palmer Assoc.	14.6
Scudder Stevens & Clark	14.4
IDS Int'l	14.4
WorldInvest	14.4
Fiduciary Trust	13.7
Batterymarch Financial	13.1
Credit Suisse Asset	13.1
FTA World	**13.0**
Warburg Invst. (SL3)	12.9
MSCI World	**12.8**

10-year returns

	%
Burgess Capital	21.1
WorldInvest	18.6
Schroder Capital (X)	18.0
Templeton Invst.	17.7
MSCI World	**15.9**
FTA World	**13.9**

Top half PIPER+ international equity funds

3-month returns

	%
Crown Financial	24.8
Marvin & Palmer (Em. mkts.)	17.8
Boston Overseas (GE pension)	16.3
Martin Currie (Far East)	16.1
Boston Overseas (Castegren)	15.7
Boston Overseas (Owens Illinois)	14.8
Kleinwort Benson Int'l	14.5
Boatmen's Trust (W)	14.1
WorldInvest (IPEF)	13.0
Pictet Int'l (Pos. value uncon.)	12.8
RCB Int'l	12.6
AIG Global Invst. (EAFE)	11.9
Pictet Int'l (Avg. risk cat. V)	11.7
CIGNA Int'l Invst.	11.6
G.T. Capital (EAFE)	11.3
Cseh Int'l (Low p/e)	11.2
Rowe Price-Fleming (Discovery)	11.2
Pictet Int'l (Pos. value con.)	10.9
Martin Currie (B)	10.8
Scudder Stevens & Clark	10.2
Baring Int'l (Act./passive)	10.1
The Principal	9.2
Wellington Trust	9.2
Nikko Capital (EAFE active)	9.2
Citibank Invst.	9.2
Pictet Int'l (Sm. cap.)	8.9
State Street (Cntry. sel. hi value)	8.9

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Quantitative Fixed Income Management

Grantham Mayo v. Otterloo (Act.)	8.9
Boston Int'l (Prime value)	8.7
Baring Int'l (Acct. 1 EAFE)	8.7
Harris Invst.	8.4
Marathon Asset (Non-U.S.)	8.3
Templeton Invst.	8.3
Provident Capital (Low p/e)	8.2
Alliance Capital (Act.)	8.2
Grantham Mayo v. Otterloo (Core)	7.9
Parametric Portfolio	7.8
Rowe Price-Fleming (Disc.)	7.6
Boston Int'l (Prime)	7.6
Rowe Price-Fleming (Trp.)	7.6
FTA Europe & Pacific	**7.6**
Capital Guardian	7.5
MSCI EAFE	**7.5**
J.P. Morgan Invst. (Non-U.S.)	7.5
J.P. Morgan Invst	7.5
Putnam Cos.	7.5

1-year returns

	%
Boatmen's Trust (W)	13.3
Pictet Int'l (Pos. val. uncon.)	13.2
Marvin & Palmer (Em. mkts.)	10.7
CIGNA Int'l Invst.	10.2
Cseh Int'l (Low p/e)	9.5
Brinson Partners (Non-U.S.)	8.5
Provident Capital (Low p/e)	8.2
Wright Investor's Service	7.7
J.P. Morgan Invst. (Non-U.S.)	7.5
J.P. Morgan Invst.	6.5
Schroder Capital (Sm. co.)	6.2
Boston Overseas (Castegren)	5.3
Putnam Cos.	5.2
Kleinwort Benson Int'l	5.0
Citibank Invst.	4.8
Baring Int'l (Act./passive)	4.5
Martin Currie (B)	4.4
Henderson Admin. (EAFE)	4.3
Baillie Gifford (NCNB Texas)	4.1
Ivory & Sime Int'l (5)	4.1
UBS Phillips & Drew (EAFE)	3.6
Wellington Trust (Emerg.)	3.5
G.T. Capital (EAFE)	3.4
Axe Core Investors (ADR)	3.3
Rowe Price-Fleming (Disc.)	3.2
AIG Global (EAFE)	2.9
Bankers Trust Invst. (EAFE)	2.9
MSCI EAFE	**2.9**
Wells Fargo Invst.	2.8
Boston Overseas (Owens Illinois)	2.8
WorldInvest (IPEF)	2.7
Pacific Financial (EFF)	2.7
The Principal	2.7
Baring Int'l (Acct. 1 EAFE)	2.7
Lazard Freres Asset	2.5
Capital Guardian	2.3
FTA Europe & Pacific	**2.3**
IDS Int'l (Act./passive)	2.2
Parametric Portfolio	2.1
Pictet Int'l (Avg. risk cat. V)	2.1
Boston Overseas (GE pension)	1.8
Pictet Int'l (Pos. value con.)	1.7
Schroder Capital (Non-U.S.)	1.6
Grantham Mayo v. Otterloo (Core)	1.6
Lombard Odier Int'l (EAFE)	1.6
Wellington Trust	1.3

5-year returns

	%
Pictet Int'l (Pos. value uncon.)	36.3
Ivory & Sime Int'l (3)	25.2
State Street (Cntry. sel. hi value)	22.3
Boston Overseas (Castegren)	22.2
CIGNA Int'l	21.0
Boston Overseas (GE pension)	20.5
Lazard Freres Asset	19.8
Martin Currie (Far East)	19.8
Cseh Int'l (Low p/e)	19.4
Provident Capital (Low p/e)	19.1
Templeton Invst.	18.5
Grantham Mayo v. Otterloo (Core)	18.0
Batterymarch Financial	17.0
G.T. Capital (EAFE)	17.0
Brinson Partners (Non-U.S.)	16.8
Scudder Stevens & Clark	16.8
Rowe Price-Fleming (Disc.)	16.7
Globe Finlay (EAFE)	16.2
Rowe Price-Fleming (Trp.)	16.2
Grantham Mayo v. Otterloo (Act.)	16.0
Baring Int'l (Act./passive)	15.8
Kleinwort Benson Int'l	15.8
Bankers Trust Invst.	15.6
Lombard Odier Int'l (EAFE)	15.5
Baillie Gifford (NCNB Texas)	15.1
Martin Currie (B)	15.0
Baring Int'l (Acct. 1 EAFE)	15.0
Henderson Admin. (EAFE)	14.9
WorldInvest (IPEF)	14.7
County NatWest (Act./passive)	14.3
FTA Europe & Pacific	**14.2**
MSCI EAFE	**14.0**

10-year returns

	%
Grantham Mayo v. Otterloo (Act.)	22.1
Templeton Invst.	21.8
Pacific Financial (EFF)	21.6
Baring Int'l (Act./passive)	19.5
Putnam Cos.	18.7
Bankers Trust Invst.	18.4
Baring Int'l (Acct. 1 EAFE)	18.0
G.T. Capital (EAFE)	17.9
Brinson Partners (Non-U.S.)	17.9
MSCI EAFE	**17.7**
FTA Europe & Pacific	**17.4**

Top decile PIPER+ balanced/TAA funds

3-month returns

	%
BRS Capital (TAA)	30.8
Chancellor (Stockshift 200)	29.6
Rittmann Capital	28.8
Chancellor (Stockshift 150)	21.3

Continued on page 26

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American National Can Co.

CHICAGO — American National Can Co. hired two managers and added to a current manager's portfolio for its $950 million fund.

Rittenhouse Financial Services, Philadelphia, and Institutional Treasury Management, Irvine, Calif., received $45 million each for new portfolios. Rittenhouse will invest in large-capitalization stocks, while Institutional Treasury will invest in intermediate-maturity bonds, according to Walt Melcher, American National's director of pension investments.

Kemper Asset Management, Chicago, will receive another $15 million for its large-cap growth account.

Arkansas Teacher Retirement

LITTLE ROCK, Ark. — The $2.5 billion Arkansas Teacher Retirement System hired two growth stock managers.

Bill A. Shirron, executive director, said Alliance Capital Management, Minneapolis, and Munder Capital Management Inc., Birmingham, Mich., will each manage equity portfolios of $200 million.

Funding will come from a cash account managed by Oppenheimer Capital, New York, and from a passive fixed-income account.

Shearson Lehman Brothers Inc., Wilmington, Del., served as consultant.

Boynton Beach Employees

BOYNTON BEACH, Fla. — The $19.6 million employees' pension plan of Boynton Beach, Fla., hired Barnett Banks Trust Co. Jacksonville, and Davis Hamilton Jackson & Associates, Houston, to each manage half of the fund's assets in balanced accounts.

Barnett Banks also was hired as the fund's custodian, said Grady Swan, finance director for the city.

The assets were previously managed by Midlantic National Bank & Trust Co./Florida, Fort Lauderdale.

Merrill Lynch Consulting Services, Jacksonville, assisted.

Graphic Communications Union

WASHINGTON — The $880 million Graphic Communications International Union Supplemental Retirement & Disability Fund hired two fixed-income specialists to manage $30 million each, said G.L. Griesbauer, administrator.

The fund hired Trust Fund Advisors, Washington, to manage intermediate-term bonds, and Criterion Investment Management Co., Houston, for long-term instruments.

Funding comes from the fixed-income portion of a balanced portfolio run by Lehman Ark Management Co., New York, which now will run a $115 million equity-only account.

Marco Consulting Group, Chicago, assisted in part of the search.

University of Houston

HOUSTON — The University of Houston endowment, with about $100 million in assets, hired two equity managers and a fixed-income manager.

Capital Technology Inc., Charlotte, N.C., and Scudder, Stevens & Clark, New York, will run $5 million each in equity portfolios. Vaughan, Nelson, Scarborough & McConnell Inc., Houston, will manage a $20 million fixed-income portfolio.

William M. Mercer Asset Planning Inc., Dallas, assisted.

Manhattan/Bronx Surface Transit

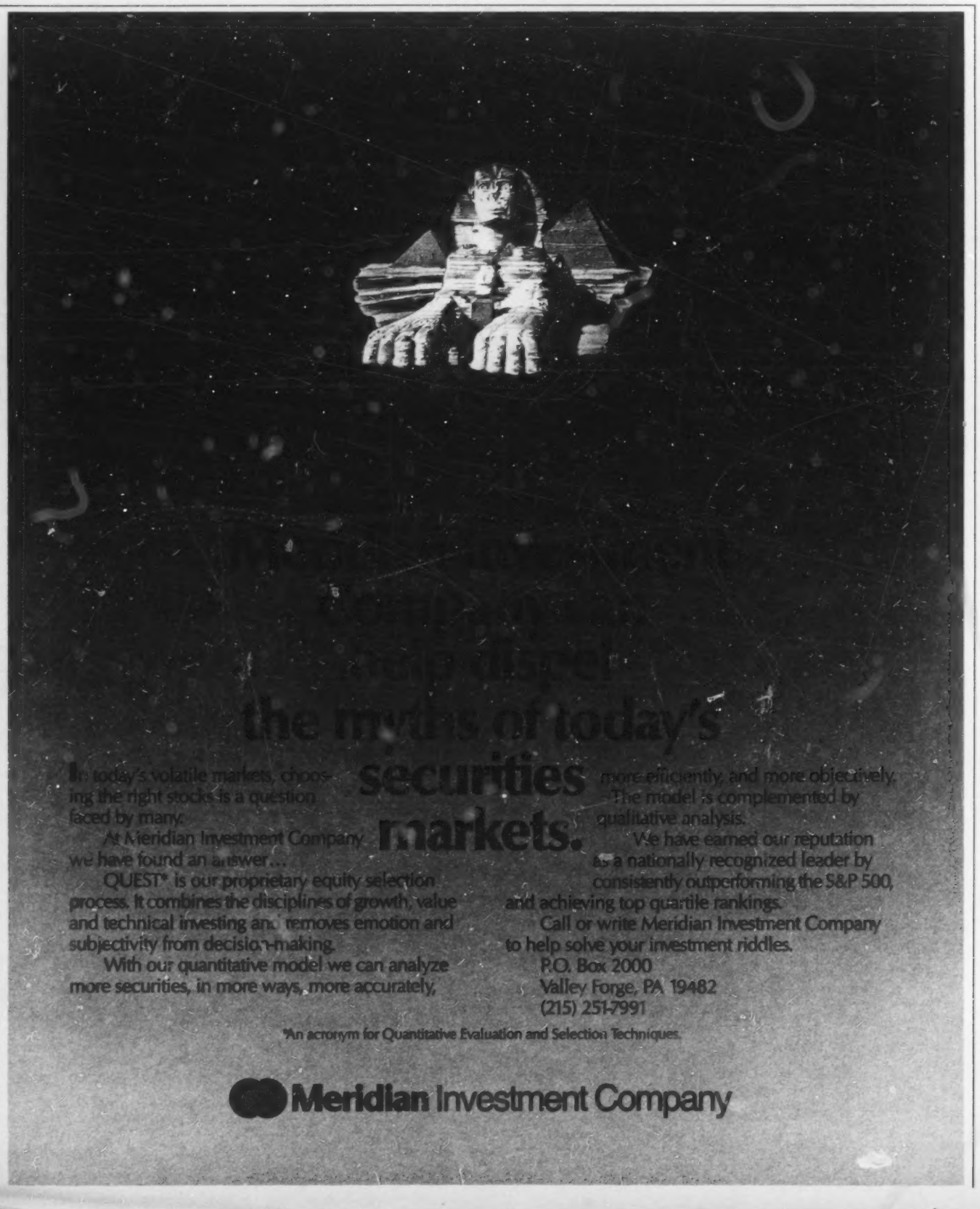
NEW YORK — The Manhattan and Bronx Surface Transit Operating Authority hired six core managers for its $100 million defined benefit plan.

The fund, a separate subsidiary of the New York City Transit Authority, hired Turner Investment Partners, Berwyn, Pa., for active growth equities; Lord, Abbett & Co., New York, and NCM Capital Management Group, Durham, N.C., for active value equities; WR Lazard & Co., New York, for structured fixed income; Morgan Grenfell Capital Management, New York, for core fixed income; and Bank of Ireland Asset Management, New York, for international equities.

Walter Weinert, assistant chief financial officer for the authority, said the distribution of assets was the first for the fund, which was established as a tax-qualified plan in November 1989. The assets have been managed in short-term accounts.

Specific dollar allocations to each manager have not been determined.

See **Movers** *on page 33*



Continued from page 24

Harris Bretall Sullivan Smith (Gro.)	18.8
Stephenson & Co. (Value)	18.6
Investment Counselors	17.6
Fred Alger Mgmt.	16.9
Denver Invst.	16.8
Brown Capital (Rel. value)	16.4
Fayez Sarofim	16.2
Provident Invst.	15.9
Cheswick Invst.	15.7
Turner Neill Invst. (Core)	15.7
Kemper Asset	15.5
Wagstaff, Lodefink	15.4
Caldwell & Orkin	15.3
Forstmann-Leff Assoc.	15.2
Ashfield & Co.	14.8

1-year returns

	%
Rittmann Capital	39.9
Cheswick Invst.	33.2
Chancellor (Stockshift 200)	32.7
J&W Seligman	29.3
Fred Alger Mgmt.	26.1
Harris Bretall Sullivan Smith (Gro.)	25.4
Provident Invst.	24.9
Chase Invst.	24.4
Brown Capital (Rel. value)	23.7
Investment Counselors	23.5
Denver Invst.	23.5
Turner Neill Invst. (Core)	22.8
Fayez Sarofim	22.8
Northern Capital (Asset alloc.)	22.7
Chancellor (Stockshift 150)	22.7
Ashfield & Co.	22.5
Kemper Asset	21.7
Caldwell & Orkin	21.6
Value Line	21.3

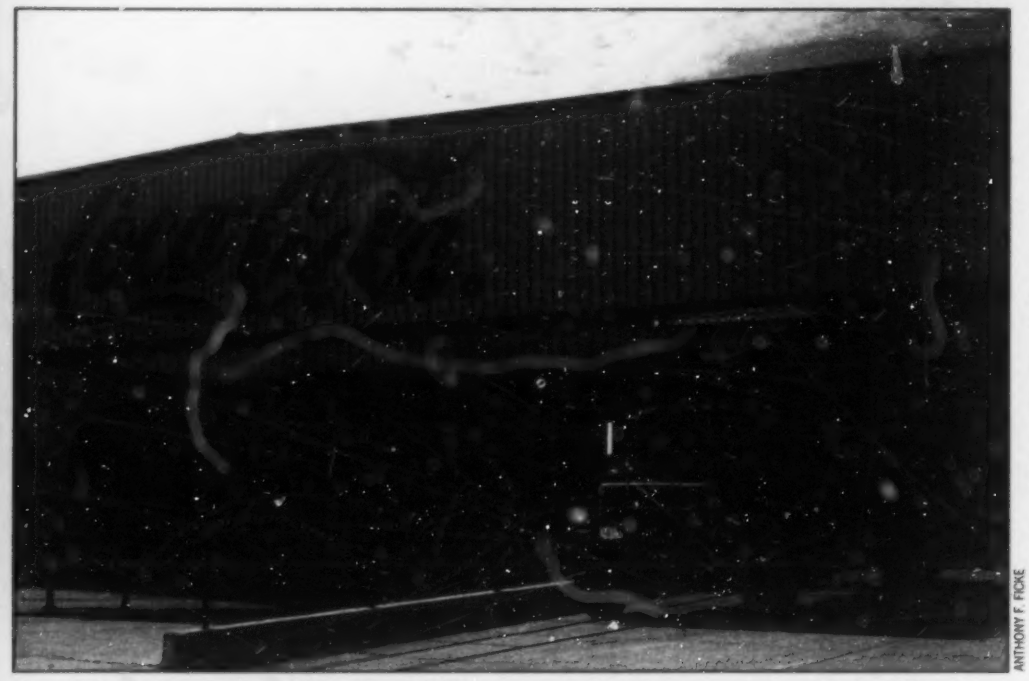
5-year returns

	%
Oxford Capital	20.2
Chancellor (Stockshift 200)	19.7
Investment Counselors	17.0
Institutional Capital	16.3
Turner Neill Invst. (Core)	16.2
Quantilogic Asset (TAA)	15.7
Fayez Sarofim	15.6
Bankers Trust Invst. (Act. TAA)	15.2
Cheswick Invst.	15.1
Value Line	15.0
Zaske, Sarafa & Assoc.	15.0
Dolan Capital	14.6
Dean Invst.	14.6
Harris Bretall Sullivan Smith (Gro.)	14.4
Provident Invst.	14.3
Lincoln Capital	14.3
Brinson Partners (Global)	14.2

10-year returns

	%
BRS Capital (TAA)	19.9
First Bank Milwaukee	19.4
Penteq (Stocks/cash)	19.1
Zaske, Sarafa & Assoc.	19.0
Chancellor (Assetshift 65)	18.8
Wells Fargo Invst. (3-way TAA)	18.5
Dolan Capital	18.4
Investment Counselors	18.4
Dean Invst.	18.3
Caldwell & Orkin	18.2
Mellon Capital (3-way alloc.)	18.0
J.P. Morgan Invst. (TAA)	17.9

SPECIAL REPORT: CROSS-BORDER FINANCING



ANTHONY F. FICKE

Coca-Cola Co. is spending millions to establish a customer base in new markets of Eastern Europe.

Smaller targets spotlighted

Middle market becomes new hotbed of dealmaking

By Marlene Givant Star

Global mergers and acquisitions activity has fizzled this year, but that's not stopping a few steadfast companies from pursuing their strategic visions abroad.

For F.W. Woolworth Co., New York, that vision is Europeans in state-of-the-art sneakers. For Coca-Cola Co., Atlanta, it's consumers in Eastern Europe and other "virgin" beverage markets bubbling over soda pop. For Ashland Oil Inc., Ashland, Ky., it's gaining a toehold in Southeast Asia's so-called Pacific Tigers.

Some companies that have been out of the acquisition game for years have bought businesses this year as prices are more realistic and competition is more relaxed.

American Express Co., New York, which hasn't had a major acquisition by a wholly owned subsidiary in several years, is negotiating the purchase of Signet Ltd., a bank card processing organization in the United Kingdom.

Even a few billion-dollar cross-border deals grabbed headlines. Earlier this month, Square D Co., Palatine, Ill., finally succumbed to a sweetened $68 a share or $2.23 billion takeover bid from France's Schneider S.A.

Big deals are rare. In 1990, there were 361 U.S. acquisitions by European buyers worth $26.3 billion, compared with $30.4 billion in 1989, according to Acquisitions Monthly. During 1990, European companies — led by U.K. acquirers — made just 67 $50 million-plus acquisitions in the United States compared with 90 in 1989 and 104 in 1988.

But the number of smaller U.S. transactions by European buyers (in which no value was disclosed) increased to 132 last year from 92 in 1988, the publication said.

Likewise, privately owned mid-size European companies are hot on the deal trail with some merging to form pan-European organizations across the Continent.

In the period 1985 to 1990, there were 165 management buy-outs on the Continent, led by France (with 29), according to a study by KPMG Peat Marwick McLintock, London. In 1989 alone, the United Kingdom had more than 350 management buy-outs. "The middle market, in Europe especially, continues to be active in terms of deals we're seeing," said Neal Howe, managing director-marketing of Schroder Ventures, New York.

But in aggregate, mergers and acquisitions plunged in the first quarter, with all deals involving U.S. targets down 41.6% to $36.4 billion from $62.35 billion in the heady first quarter of 1990, according to IDD Information Services Inc., New York. The dollar volume of completed deals involving targets in the United States and Europe fell by virtually the same percentage, to $54.2 billion from $91.9 billion in the first quarter of 1990.

Where the Japanese are

Like U.S. companies, Japanese firms are focusing their attention on Europe — the United Kingdom garnering the most cross-border transactions involving Japanese, and France, second. But the Netherlands attracts more Japanese investment in gross value terms, according to the Japan External Trade Organization, Tokyo.

In the United States, big Japanese companies have placed greatest emphasis on the entertainment and leisure sector, investing $10.252 billion in the two years ended Dec. 31, 1990. In Europe, Japanese companies are focusing most heavily on computers, with investments of nearly $1.5 billion in the same period, according to Japan M&A Reporter.

Acquisitions of U.S. companies by firms in the Pacific basin excluding Japan declined by more than half in 1990 to $1.431 billion, while U.S. companies nearly quadrupled the dollar volume of their activities in that region to $4.115 billion, according to Pacific M&A Reporter.

Many strategic cross-border deals are financed mostly or entirely with cash, a logical choice because the slowdown in M&A across the board is due largely to the tightening of bank credit, lack of available public junk bond markets and the recession.

When borrowing is needed, it is often in the targeted foreign market, so acquiring companies can match the currency of the liability with future cash flows of the foreign entity. Local market regulations and tax considerations also factor into the equation.

While M&A is slow now, the long-term allure of the lucrative advisory business is prompting big investment banking boutiques like Wasserstein Perella & Co. and The Lodestar Group, both of New York, to gear up for developing business abroad.

"We made an international commitment before it was fashionable . . . One-third of our peo-

See **Middle** *on page 30*

Top European acquisitions in the U.S. during 1990

Target (U.S.)	Bidder	Value ($ mils.)
Rorer	Rhone-Poulenc (France)	3,254
Norton	Saint-Gobain (France)	1,920
Home Insurance	TVH Acquisition (Sweden)	970
Peabody	Hanson (U.K.)	726
Corroon and Black	Willis Faber (U.K.)	704

Tax laws keeping foreign loans foreign

By Margaret Price

When International Paper Co. launched an overseas acquisitions drive in 1987, the company ran into a costly problem for American multinationals: U.S. tax law.

Tax law, especially since the 1986 Tax Reform Act, often has discouraged U.S. parent companies from borrowing in their name for foreign business expansion. Lending money to foreign subsidiaries also has tax consequences.

Some experts believe the tax law has discouraged overseas expansion by U.S. companies just as some were positioning themselves to compete in Europe after 1992.

International Paper quickly learned how to cope. In the case of the $35 million acquisition of Swedish paper company Bergvik Kemi AB in 1988, International Paper initially borrowed funds in its name from a U.S. bank to purchase shares of Bergvik Kemi.

A year later, International Paper used a Swedish subsidiary, Anitec Sweden, to purchase shares of Bergvik Kemi and used the proceeds of that sale to repay the the parent company's initial borrowings to buy Bergvik Kemi. That put the debt on the books of an overseas IP subsidiary — a process that ultimately allowed International Paper to claim a full deduction from the interest expense that could be used as a foreign tax credit.

Experts say other companies have also employed strategies that enhanced their ability to take foreign tax credits — and/or strategies to eschew tax problems from the Internal Revenue Service's netting rule.

The netting rule, which has rankled many companies, may be soften soon, since the Internal Revenue Service has proposed revisions to the existing provision.

But under the current netting rule, a U.S. company's ability to take foreign tax credits is harmed if the parent builds up a significantly higher debt-to-asset ratio than exists for its foreign operations. The idea: to discourage U.S. multinationals from borrowing and lending money to foreign units and getting a tax credit both in the United States and abroad for interest on borrowing.

But even with softened netting rules, corporate executives say the main problem would remain. They say the U.S. government is intruding on — and sometimes even distorting — the process of foreign business expansion.

Robert Stricoff, a partner with Arthur Andersen & Co., New York, said U.S. tax regulations have "made it more expensive to invest overseas than before the tax laws changed."

As a result, companies' returns from foreign operations "have to be higher than they would have before the law changed," Mr. Stricoff said. In addition, he said, the tax provisions put U.S. companies at a competitive disadvantage compared with foreign companies stalking the same post-1992 opportunities in Europe.

"U.S. tax policy is not nearly as advantageous to foreign investment as many other countries' policies are," Mr. Stricoff said.

Not surprisingly, many U.S. corporate executives have complained to the IRS. According to Tax Analysts, publisher of Tax Notes, the IRS received more than 50 comments from companies and individuals about netting rules.

Donald Foley, International Paper's assistant treasurer, said tax considerations have been a key issue in financing foreign acquisitions since 1987. While tax issues hadn't derailed any of International Paper's plans, he said, "it's possible it could have an effect on acquisitions in future."

Of course, the effects of U.S. tax provisions aren't all bad. Borrowing abroad can mean borrowing in the home currency and debt markets of the acquisition for exposure purposes. Such local borrowing might make economic sense, Mr. Foley noted.

But in Mr. Foley's view, current tax provisions do encourage foreign borrowing. By lowering the U.S. corporate tax rate to 34% from 46%, which is lower than the corporate tax rates of many foreign countries, 1986 tax changes provided another incentive to borrow overseas and to use debt instead of equity. That's because foreign units of U.S. companies could get a more significant interest deduction from their local taxes if they did the borrowing.

A U.S. Treasury official, who asked not to be named, said tax-dodging practices by some companies prompted the change.

Some companies found that by borrowing in the name of entities that had little or no foreign-sourced earnings, they could avoid losing out on foreign tax credits, the Treasury official said. After all, a tax deduction for interest expense will depress overall foreign earnings. Of course, higher earnings were preferable: the higher the earnings from abroad, the higher the foreign tax credits that accrued to the U.S. parent.

According to the Treasury official, Congress attempted to stop this tax dodging by toughening its rules on expense (including interest) allocations between U.S. companies and their foreign units. Effectively, the rules reduced net foreign income and thus lowered U.S. multinationals' foreign tax credits.

In 1988, the IRS imposed the netting rule that effectively discourages companies from making loans to their foreign units.

Taken together, these rules "were trying to prevent abuses," not address broad capital markets issues, said the Treasury official. He nonetheless agreed that the current netting rule "makes it hard to borrow here and lend overseas if a corporation cannot use all its foreign tax credits."

But some companies aren't letting taxes and other issues thwart opportunities.

Morrison Knudsen Corp., Boise, Idaho, recently announced its intent to purchase for $33 million a 49% stake in McConnell Dowell Corp. Ltd., an Australian-based engineering and construction firm. Morrison Knudsen will finance the investment with $9.6 million of the proceeds from a proposed public offering of 1.5 million shares of common stock that should raise about $75 million, and $23.4 million as a loan to McConnell Dowell. The loan will be in the form of convertible notes.

According to a company spokesman, a "big attraction" for this financing structure is that Morrison Knudsen will be receiving a "terrific return" of 13.9% on the notes. ■

Middle

Continued from page 28

ple and one-third of our business have an international dimension. Over time we'd like one-third to one-half of our business to have an international dimension," said Jeffrey A. Rosen, president of Wasserstein Perella & Co. International Ltd., London.

Some firms actually create their own global deals. In what it calls a group building strategy, Schroder Ventures has been forming pan-European companies with capital from its venture and buy-out funds.

Ashland Oil's experience

Like many companies, Ashland Oil is targeting Europe, as well as the Pacific Basin, for its acquisition plans.

"There's competitive tension as projects compete for funds (domestically and internationally). We're beginning to place a higher priority on selected foreign investments because of the globalization of many of our businesses, particularly the chemical business," said Paul Chellgren, senior vice president and chief financial officer.

Ashland recently acquired a private U.K. chemical distribution company for less than $10 million, financing the deal through local bank loans in sterling guaranteed by the parent company.

The new company is called Ashland Plastics U.K. Ltd. Previously, it was a combination of three or four different companies owned by one group of individual investors.

"It was pretty conventional bank financing. The debt service is to be handled by the new operation in sterling. We thought it was appropriate to finance in local currency," Mr. Chellgren said.

Particularly in countries with high tax rates, Ashland would rather have local interest expense denominated in local currency so it may be deducted on in-country tax returns.

In the Pacific Basin, Ashland Oil might establish a chemical plant in Australia, which would be financed with Australian dollar borrowings from local banks, international banks or a combination. It also completed a 50-50 venture in a Southeast Asian country with a local investor, deploying U.S. dollars because "we see it being a permanent cash infusion. Subsequently the company will finance itself in local currency," he said.

The deal won't be announced for several months.

"We're not alone in trying to get our feet on the ground in terms of the Pacific Tigers," he said.

Often companies choose to focus on regions in which products that are old-timers in the United States might command a fresh look.

"Mature products in the U.S. would be at a more rapid stage of use and development internationally. The foundries business is mature in the U.S. It's much less so in China, Taiwan and Korea, where they're building new foundries," Mr. Chellgren said.

Woolworth's way

Foundries are to Southeast Asia what athletic shoes are to Europe, at least according to F.W. Woolworth, which plans to race through Europe establishing Foot Locker athletic shoe stores, largely through cash acquisitions.

Woolworth hopes to add at least 53 stores in Europe so that it will end 1991 with more than 84.

"We see Foot Locker Europe as an event consisting of 1,000 stores in the next 10 to 15 years," said C. Jackson Gray, vice president-corporate planning and development. Per-capita consumption of athletic shoes in Europe is one-thirteenth the level in the United States, he noted.

After establishing its first store in Germany in 1987, Woolworth purchased ProFoot in the Netherlands in early 1990, converting the 17-chain stores in Holland and Belgium to Foot Lockers. Early this year, it acquired Freedom, a small athletic shoe chain in the United Kingdom, and will convert those stores to Foot Locker as well.

Woolworth executives hope to open stores in France and Italy later this year, but by taking over retail store leases rather than through acquisitions. They also might expand Lady Foot Locker in Europe.

Although it loves sneakers, Woolworth does not have a one-track mind.

The company also plans to add seven Woolworth stores in Germany; 30 Woolworth shops, compact versions of the store; 15 Rubin costume jewelry stores; eight Moderna shoe stores; and five Lady Plus stores, which sells large-size women's apparel.

For companies with mature consumer products, so-called emerging markets are the most promising frontier.

PepsiCo Inc., Purchase, N.Y., in October acquired more than 70% of the stock of Empresas Gamesa, Mexico's largest cookie manufacturer for approximately $300 million. The acquisition was done through a tender offer through PepsiCo's Mexican snack food subsidiary, Sabritas S.A. de C.V.

Its archrival, The Coca-Cola Co., has a $450 million investment program to build its soft drink business in eastern Germany. Coke kicked off the program in April, opening a $45 million bottling plant in Halle, Germany.

In addition, Coca-Cola Amatil Ltd. of Australia and Budapest's BULIV created a more than $14 million joint venture to manufacture and market Coke and other soft drinks. The parent also plans to invest $50 million in Poland.

Financing expansion

Just as there is no one way of doing business abroad, there is no one way of financing overseas.

Millicom Inc., New York, is building its cellular networks through its affiliate, Millicom International Cellular, in such remote spots as the Philippines, Pakistan, Sri Lanka, Guatemala and, most recently, Ghana.

To finance the programs, the company might funnel cash directly to the operation, perhaps alongside cash from local partners. Or it could borrow from local banks, international banks or a combination, or borrow from international agencies such as The World Bank. It also might borrow in the United Kingdom or in local capital markets when possible, said J. Shelby Bryan, chairman and chief executive officer.

Millicom International Cellular was granted a cellular telephone license in Ghana in mid-May. It holds a majority interest in a Ghanian operating company, Millicom Ghana Ltd., with the remaining interest held by local partners.

"We're in the middle of discussions with a number of different financial institutions in the U.S. and outside on a private placement to finance the building of the Ghana network," Mr. Bryan said.

But the company's principal focus now is Europe, because several countries have decided to grant cellular licenses.

Like Millicom, American Express Co. must finance operations in out-of-the-way places. In 1990, the company added Dresden, Budapest and Berlin to its charge card business' network of more than 1,500 locations in more than 120 countries.

"With respect to ongoing operations, we're always looking for the most tax-efficient way to fund in a given country. We borrow in the U.S. and on-lend (to the foreign subsidiaries) as well as borrow overseas," said Ron Starkman, vice president and assistant treasurer of American Express. Another strategy involves issuing in one currency and swapping into one or more other currencies as needed to fund its businesses overseas. The card is denominated in 31 currencies.

In addition to the pending Signet deal, Amex has established a joint venture with Sumitomo Bank in Japan, in which the bank will provide credit support and distribution for cards and a joint marketing effort with Lloyd's Bank in London for the corporate card.

Global banking boutiques

Although slow now, banking boutiques are betting on an upsurge in cross-border activity.

In Wasserstein Perella's European expansion, only gentry need apply. In February, it appointed Lord Robert Haslam, the former chairman of British Coal Corp., non-executive chairman of its U.K. merchant banking arm, Wasserstein Perella & Co. International Ltd. In addition, Sir Peter Levene, former chief of defense procurement for Britain's Defense Ministry, signed on as deputy chairman.

In March 1991, it formed Wasserstein Perella Deutschland GmbH, appointing Helge Petersen as chief executive. Mr. Petersen, a Harvard MBA, spent nine years as a partner at McKinsey & Co. Inc. in Germany. Most recently, he was chief executive of a private German company.

In 1990, Wasserstein Perella & Co. opened an office in Paris and formed a 300 million European currency unit Euro-mezzanine fund with Banque Paribas, the largest such fund in Europe, in which Commerzbank and Amro Bank are major investors.

Of course, the firm's European voyage hasn't been all smooth sailing. Jean-Luc Biamonti, a founder of its Paris office, left in April. Prior to Mr. Biamonti's departure, Franco Reviglio, former minister of finance of Italy, was named senior managing director.

The firm's Japanese business is conducted through Nomura Wasserstein Perella, with offices in Tokyo and Osaka. Nomura Securities Co. Ltd. is a minority equity investor in Wasserstein Perella & Co.

Reflecting its global presence, "we're looking at a number of projects involving American, Japanese or European companies looking at acquisitions in Europe," Mr. Rosen said.

Another large U.S. boutique, The Lodestar Group, is moving into Europe. In May, it entered into a strategic partnership specializing in corporate finance advisory work. Subject to Federal Reserve Board approval, Societe Generale will make an investment in Lodestar, joining Yamaichi Securities Co. Ltd., Lodestar's Japanese link, which already has a minority stake.

Some firms aren't forming joint ventures or adding staff.

Schroder Ventures is instead building pan-European companies using the $1.5 billion in capital of various venture and buy-out funds it manages.

"European private businesses are extremely fragmented and privately owned. By making acquisitions around a quality management team and building additional companies in and around that holding company, we're able to bring together a more profitable business that will be more attractive for listing on a local exchange or an acquisition target for a larger multinational company," said Schroder's Mr. Howe.

Schroder is actually benefiting from the credit crunch in that it is able to find many overleveraged companies in need of cash, according to Tim Howe, a partner with the firm.

In the firm's most recent group building effort, a U.K. holding company, CAM Galaxy Group, was established to acquire marketing services companies. The firm's German fund acquired 60% to 80% of ProConcept GmbH and Kreis Agentur GmbH in Germany and C&M Werbegesellschaft in Austria. The rest is owned by management of the companies. ■

European acquisitions in the U.S.

Bidder nationality	1988	1989	1990	Total
France	7,122	5,054	5,405	16,181
Germany	1,678	586	4,405	6,669
Sweden	561	436	1,334	2,331
Italy	330	469	785	1,584
Belgium	807	133	70	1,010
Norway	10	66	273	349
Denmark	92	75	37	204

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GICs

Continued from page 3

cause it will cost participants about 115 basis points a year.

Adding to the quandary for the plan sponsor is its legal responsibilities.

"As a fiduciary, you must maximize yields," he said. And those yields come down when a GIC-laden 401(k) plan adds competing fixed-income funds.

Plan participants have made GICs the most popular investment option, and sponsors don't want to be in the same position as some who face making up losses their participants realize from those two California insurers.

"It's a paranoia with some," said James Hiner, principal at William M. Mercer Inc., a general consulting firm.

Paranoid or not, sponsors are asking about adding balanced and U.S. agency fund options to their 401(k) plans. They realize the "guaranteed" in GICs only goes as far as the financial health of the issuer.

"Some say the unthinkable has happened, a default of an insurance carrier," said Larry Mylnechuck, executive director of the GIC Association, Lake Oswego. Ore., an organization of GIC issuers.

"A lot of plan sponsors are asking us about adding competing options, and we have to tell them, 'It might involve restructuring your GIC portfolio,' " said Steve Finegan, vice president at Morley Capital Management Inc., Lake Oswego, which handles portfolios of GICs for plan sponsors.

Restructuring could mean either shortening the GIC maturities or adding more of a cash buffer, he said. Either means lower GIC returns.

"Most contracts have some sort of language that the issuer has the right to review the contract if conditions change," said Sharon Morell, manager of GIC contract negotiations at Morley Capital.

A Morley survey of 34 large issuers indicated the reason: "When competing options exist, transfer restrictions are necessary to protect the issuer from disintermediation between the GIC fund and a competing fund," the report said. (Disintermediation means assets are withdrawn and placed in a higher paying investment.)

"Direct transfers to a competing fund would allow for risk-free interest rate arbitrage by the participants at the expense of the issuer who bears the liquidity burden," the report explained.

According to the Morley survey, if competing options are added without transfer restrictions, the issuer's risk charge to the plan sponsor would be more than twice the charge than if the participant were required to invest the GIC money elsewhere for six months before being allowed to invest it in a competing option.

"It's not so much the risk charges, as the number of companies that won't write policies," Mr. Finegan said.

According to the survey, only three of the 34 issuers would even offer a quote for a GIC if there were no transfer restrictions on a competing option; if a three-month waiting period was required, only 18 would offer quotes, even with a higher risk charge; and with a six-month period, 22 said they would offer a quote.

This lesson in economics has caught some plan sponsors by surprise, according to consultants.

"I think it's pretty clear they don't understand it," said Ken Ingham, president of Ingham & Co., a consulting firm based in Coral Gables, Fla.

"We still have some funds that thought (GICs) were completely safe," said Mercer's Mr. Hiner. "There was no allusion to the fact that the guarantee is only as good as the insurance company."

A better understanding — by sponsors and participants — of the risks and costs associated with GICs is "the critical issue of the 1990s," said Mr. Mylnechuck.

Reynolds + Reynolds' Mr. Currier said if the board decides to stay with its credit-cautious GICs, "a massive communication campaign" will be necessary to let participants know the potential risks and the steps the firm has made to ensure investments are only in high-quality GICs. ■

MONEY MOVERS

Continued from page 26

Mount Holyoke College

SOUTH HADLEY, Mass. — Mount Holyoke College hired United States Trust Co. New York, as its custodian effective July 1, according to Jan Albano, director of treasury operations.

The school sought to consolidate custodial services for its domestic and equity securities with one firm. Boston-based Bank of New England formerly handled domestic securities and Boston Safe Deposit & Trust Co. oversaw foreign securities.

Newport News Employees

NEWPORT NEWS, Va. — The $210 million Newport News Employees' Retirement Fund hired The Putnam Cos. Inc., Boston, to manage $3 million in a small-cap account.

Ronald Jones, benefits administrator, said the move followed an asset allocation study that indicated greater need for diversification.

Dahab Associates Inc., Islip, N.Y., was the consultant.

Omaha Public Power District

OMAHA — The $240 million pension fund of the Omaha Public Power District awarded $5 million to EverGreen Capital Management Inc., Omaha, for management in a value equity account.

Assets for the new hire will come from an existing manager, as yet undetermined, said Ken Fielding, vice president of corporate affairs.

Rockefeller Foundation

NEW YORK — The $2.1 billion Rockefeller Foundation fund hired a manager for a currency management account and increased the allocation for another.

Bankers Trust Co. and Windham Capital Management, both of New York, were allocated $50 million each to manage currency forward and futures contracts.

Windham was hired in 1989 to manage $5 million.

Spokane Employees

SPOKANE, Wash. — The $82 million Spokane Employees Retirement System hired three managers to manage more than $40 million.

Sirach Capital Management, Seattle, will manage $13 million in equities. Capital Consultants Inc., Portland, Ore., and Olympic Capital Management, Seattle, will manage $15 million each in fixed income, said James Bennett, director of the retirement system.

He said the equity money will come from cash, the bond money, from internally managed assets.

Merrill Lynch Capital Markets Group, Spokane. assisted in the search.

Empire

Continued from page 2

The building is under a master lease to a partnership, Empire State Building Associates, until 2075. Prudential's annual income from the lease is $3.4 million, and that is scheduled to drop to $2 million in January and to $1.7 million in 21 years. The length of the lease and the decline in income may make it hard to market the building, real estate managers and consultants said.

"The question is, 'What do you pay for a declining annuity?' " said Richard Burns, principal of Aldrich, Eastman & Waltch Inc., Boston.

Mr. Burns said likely buyers for the building would be a wealthy individual or group of individuals, possibly from Europe or the Middle East. "If it wasn't the Empire State Building, most people would take a pass," he added.

Despite these reservations, Mr. Burns added one couldn't assume his company wouldn't be interested in the property; further scrutiny is necessary to determine how attractive the deal might be.

Kenneth Campia, president of LaSalle Advisors Ltd., Chicago, said it's too early to tell if his firm would be interested, as it hasn't gathered information on the building yet. "I'm sure we'll have a chance to take a look at it," he said.

Heitman Advisory Corp., Chicago, wouldn't be interested in the building because of its age and because of concern about the New York office market, said Norman Perlmutter, chairman of Heitman Financial Services Ltd., Heitman Advisory's parent. The buyer likely will be someone attracted by the building's history and reputation, he said: "Somebody who, for some reason or other, wants to own the Empire State Building."

Paul Saint-Pierre, president of Pension Realty Advisors Inc., San Francisco, said the building most likely will attract an "emotional buyer" or someone with a strategic reason to want to own it, such as the current leaseholder.

If the price is in the neighborhood of $50 million, the income from the lease would produce a yield less than that on a passbook savings account, making the building unattractive as strictly an investment play, he said.

Still, the buyer could be a major pension fund that wants to own real estate but doesn't want to take on the risks associated with this asset class, said Stephen Roulac, managing partner of The Roulac Group of Deloitte & Touche, San Francisco. Because of the lease arrangement, the transaction would be more like buying a financial instrument secured by real estate and less like a typical real estate transaction, he said.

Said Prudential's Mr. Hoffman: "This asset is very much like a bond in terms of the safety of the income stream . . . There are certain buyers who, because of the unique character of the property and the income stream, would be interested in this type of safer, bondlike investment."

The leaseholder group, led by Peter L. Malkin, a New York attorney, reportedly is interested in buying the building outright. Mr. Hoffman declined to confirm this, adding, "Certainly we would be happy to receive an offer from Mr. Malkin." Mr. Malkin did not return calls for comment.

The leaseholder subleases the building to Empire State Building Co., which is responsible for finding tenants and operating the property. Mr. Malkin also is involved with the sublessor, as is hotel executive Harry Helmsley.

According to Mr. Roulac's book, "Modern Real Estate Investment," Prudential bought the land under the building in 1951 for $17 million and acquired title to the building in 1961 for $29 million. Prudential officials would confirm the years but not the amounts. Empire State Building Associates has a lease on the building for 114 years, dated from 1961. ■

Looking Ahead in 1991
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AT DEADLINE

SEI blasted in Houston deal

A City Council audit committee has recommended terminating SEI Capital Resources as consultant for the $500 million Houston Municipal Employees Pension System.

The committee report criticized SEI's involvement in a golf course and residential development investment the fund made, which included $7 million in below-market loans.

Maritime fund settles

The Masters, Mates & Pilots pension and individual retirement account plans will recover $21.9 million under a partial settlement of claims brought against the funds' trustees, custodian, and former attorneys and auditors.

The complex litigation involved the imprudent investment of $31 million with Tower Asset Management in speculative venture capital and maritime investments. Tower received investment banking fees for the deals; the fund lost about $28 million in principal and income.

Guaranty bills exclude GICs

At presstime, a bill making Colorado the 48th state to have a life and health insurance guaranty association is sitting on Gov. Roy Romer's desk awaiting his expected signature.

The bill is effective July 1, and seeks to establish a fund to cover policy losses from defaulted insurance contracts. The Colorado bill specifically excludes GICs from coverage, as does legislation in Idaho, also effective July 1.

Funds report hirings

Jewish Hospitals in Cincinnati hired RCM Capital to run a $55 million long-duration fixed-income portfolio. Callan

Continued on page 39

INSIDE

A monumental problem

U.K. pension funds have banded together to try to mitigate the impact of mandated cost-of-living increases and a recent court ruling, which together could eat away at the funds' surpluses. Page 3.

Standard Brands Paint reached agreements to help restructure debt and work with stockholders.

Investors win concessions

Ailing firm compromises on loans, shareholder demands

By Marlene Givant Star

TORRANCE, Calif. — Standard Brands Paint Co., threatened with a proxy fight, has worked out agreements to ease its debt burden and to increase participation from shareholders.

Senior note lenders Transamerica Life Insurance and Annuity Co., Los Angeles, and SunAmerica Cos., Los Angeles, which is also a major shareholder in the company, will allow the troubled paint retailer to sell some closed store sites and undeveloped land in Texas and use the proceeds to reduce debt. In addition, the lending institutions agreed to forgive covenant violations by the company and to modify financial covenants applicable to future operations. In exchange, the insurers received new classes of preferred stock with conversion prices less than half that of the old.

Standard hired New York investment bankers Allen & Co. Inc. and Donaldson, Lufkin & Jenrette Securities Corp. to advise it on possible debt restructuring of $27.5 million held by Security Pacific National Bank, Los Angeles, and capital-raising options.

On the stockholder front, the company reached an accord with a group of institutional investors, including the California Public Employees' Retirement System, which owns almost 3% of the company, and Husic Capital, San Francisco, which owns 15% of the company as well as John Lanshaw, an outside director who owns 15.9% of the stock and had been waging a proxy fight against management.

Satisfying disgruntled stockholders, the company agreed to

See **Demands** *on page 39*

Tennessee to hedge in-house

By Trudy Ring

NASHVILLE, Tenn. — The $9.5 billion Tennessee Consolidated Retirement System will begin an internally managed currency hedging program under recently approved legislation.

Chuck Webb, chief investment officer, said it's unusual for a pension fund to manage currency in-house.

The legislation authorizes the system to use currency forward contracts on the yen, British pound and deutsche mark vs. the U.S. dollar. The measure was approved by the Legislature and signed by Gov. Ned Ray McWherter in late May.

Those three foreign currencies constitute the bulk of the system's international exposure, Mr. Webb said. The system has about 7% of its assets in foreign securities, with about a 2-1 ratio of stocks to bonds.

The fund, which is managed completely in-house, has been investing internationally since 1983. During that period, it has racked up significant gains through currency movements alone, and the hedging program will allow it to protect these gains, Mr. Webb said. Also, hedging will help it add value through catching long-term currency trends, he said.

What's more, being able to hedge means the currency question can be separated from security selection: "This frees us up to manage our stocks and bonds as stocks and bonds," Mr. Webb said.

He said the Tennessee system has significant internal experience and expertise with international investing. Some portfolio managers are dedicated solely to this asset class, he said.

The fund's internal staff has developed a model that will indicate the optimal amount of hedging at any given time. The international exposure will never be 100% hedged or completely unhedged, Mr. Webb said.

The fund will work initially with a group of six brokerage firms that will execute the trades; more firms may be added later. The staff is in the process of selecting the firms.

Also, before the program can start, the fund's legal advisers have to research such technical questions as the fund's recourse if a broker does not fulfill a trade. Mr. Webb said he hopes this work will be completed and the program up and running in a month or two. ■

IBM sticks with realty but freezes new buys

By Steve Hemmerick

STAMFORD, Conn. — IBM Corp.'s $22 billion pension fund has decided to "remain committed" to real estate as an investment class but has put a virtual freeze on investment in properties for now.

Some pension funds are withdrawing from real estate, an option IBM's pension staff and consultants examined as part of a thorough study that took months to complete.

But Kyle Escherich, an analyst with IBM's pension staff, said the investment committee and the staff study both arrived at independent recommendations to continue to hold real estate assets.

Mr. Escherich said the study found most pension funds basically had been buying real estate at the top of the market. The study, done with the help of several consultants, suggested it might be appropriate to continue investing in real estate.

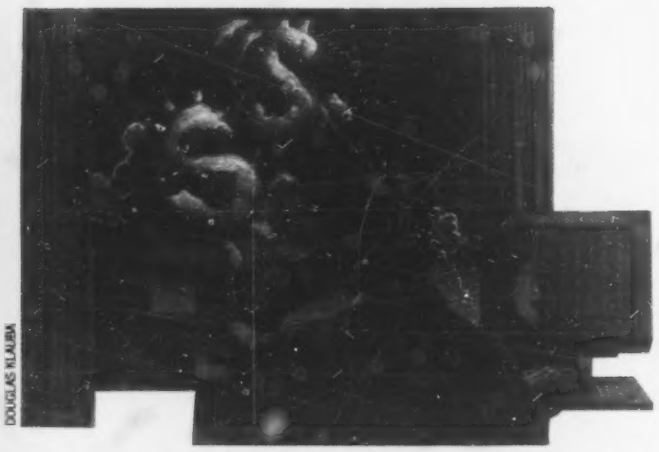
IBM's investment committee decided against buying properties for the moment because the pension fund is near its allocation limit of 10%. But even if the allocation falls significantly below 10% because of depreciation in property values, it is probable no investments will be made to bring the allocation back up.

The pension staff, at the direction of the investment committee, is pursuing efforts to solve problems in the real estate appraisal process. One remedy IBM is taking is to hire its own appraisers. Some consultants and academics have said the appraisal process is sometimes flawed because appraisers frequently are hired by real estate managers and the information about properties given appraisers by the managers

See **IBM** *on page 37*

IBM will hire its own appraisers now that it is committed to remain in real estate.

NEWS DIGEST



DOUGLAS KLAUBA

The need for diversification and expertise in specialized asset classes is slowly changing the mission of internal management for pension funds. Page 21.

Bechtel Power Corp.'s in-house investment arm is becoming the latest in a list of in-house units that offer mutual funds to outside investors. Page 4.

The clash of styles between old and new is apparently behind the decision to replace the executive director of the Washington State Investment Board. Page 22.

Insurance executives expect insolvencies in their industry to increase in the near future, according to a new study by SEI Insurance Asset Services. Page 26.

The MacBride Principles are being taken to heart by a handful of health-care and Taft-Hartley funds and the city of Boston. Page 30.

FINANCING

Institutional investors buy an unprecedented amount of debt and equities in the first quarter. Page 24.

INTERNATIONAL

The Tennessee Consolidated Retirement System is embarking upon an internally managed foreign currency hedging program. Page 1.

A group of 18 British pension funds is asking the U.K. government to delay the start of mandated cost-of-living increases for pensions. Page 3.

REAL ESTATE

The IBM Corp. pension fund decides to stick with real estate as an investment class but freezes new investments in properties. Page 1.

The now-rare practice of real estate money managers recommending consultants for advisory jobs is stirring concern in the pension community. Page 3.

DEPARTMENTS

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Real estate adviser survey set to go

Questionnaires for *Pensions & Investments'* annual survey of the largest real estate investment managers will be mailed June 25. The completed forms, to be used for a special report published Sept. 24, must be returned by July 28. If you believe you qualify for the directory and have not participated in the past, please contact Christine Philip, directory coordinator, at (312) 649-5217.

Investors set own course

Both management, dissident get shareholder support

By Marlene Givant Star

Several large institutional investors cast the deciding votes that barred a dissident investor group from winning control of Baltimore Bancorp, even though they view the bank as a poor performer with an abysmal shareholder rights record.

Rather than fully supporting either the dissident group led by Baltimore businessman Edwin F. Hale Sr. or management, the institutions brought about a middle ground of changes they hope will boost shareholder value.

The institutions — including the California Public Employees' Retirement System, Sacramento; Legg Mason Capital Management Inc., Baltimore; and SunAmerica Cos., Los Angeles — voted to support the election of six of the 16 Hale nominees. They voted against supporting the dissident group's expansion of the board or the election of additional nominees to the board.

"We voted for the challengers, but only the partial slate. Just a little representation would be just enough to spearhead the company to be more aggressive in improving returns," said Jose Arau, principal investment officer of the California system.

In addition, the institutions supported two shareholder resolutions that are believed to have passed: one on a shareholder advisory committee and one on stripping the poison pill from the company's bylaws.

It is believed to be the first time a shareholder advisory committee proxy resolution was approved by a majority of shareholders.

The approval was significant because the bank has relatively few institutional investors, making it more difficult to get propos-

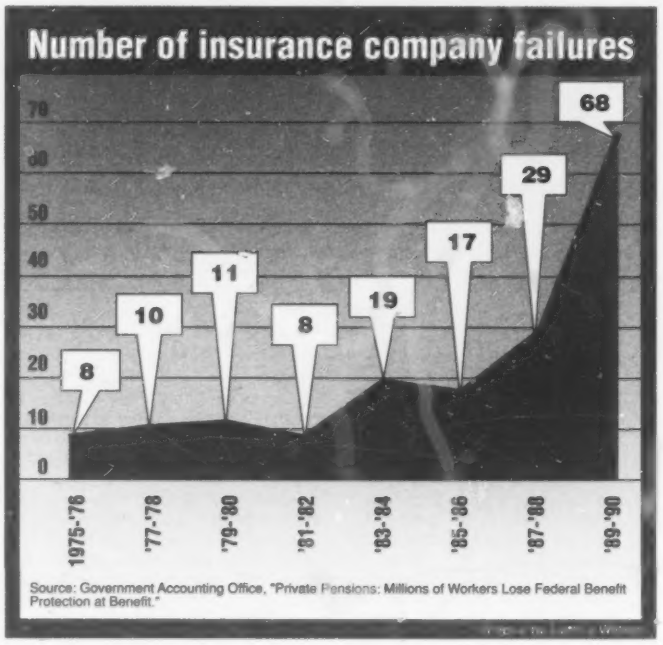
See **Bank** *on page 37*

Plans unite on Exec Life woes

By Hillary Durgin

Employee benefit executives want all of Executive Life Insurance Co.'s $1.1 billion in guaranteed investment contracts to receive the same treatment as Executive Life's annuities.

Last week, more than 50 corporate and state pension funds with more than $540 million in defined contribution plan assets invested in Executive Life contracts announced they are banding together to safeguard participants' benefits.



Source: Government Accounting Office, "Private Pensions: Millions of Workers Lose Federal Benefit Protection at Benefit."

Members of the Group Annuity Participant Protection Association include Holiday Inn Worldwide, Honeywell Inc., International Paper Co., Ralston Purina Co., Unisys Corp. and Xerox Corp.

Members were scheduled to appear last week before the Superior Court of California, Los Angeles, to seek modification of current court orders on Executive Life benefit payments.

Executive Life policyholders and annuitants are receiving 70% of their benefit payments, but benefit payments on GICs have been frozen by court order.

In addition, 25 companies that purchased Executive Life annuities have formed a group, Companies Concerned for Annuities of Retired Employees, to obtain full benefit payments for employees and retirees.

Meanwhile, concern is mounting among members of Congress over how to address potential participant losses and problems posed by the insurance industry as a whole.

See **Unity** *on page 39*

Pru unit chief starts new firm

By Terry Williams

Global Fixed Income Advisors, Newark, N.J., lost six clients, $45 million in assets under management and three employees when Chief Investment Officer Kenneth Windheim left May 31 to start Strategic Fixed Income L.P.

Pension funds are among the six clients, according to Mr. Windheim, although he declined to identify them.

The new firm is a partnership with Strategic Investment Partners Inc., Washington, a manager of managers with $5.5 billion of assets under management. Strategic Investment Partners is the limited partner, and Mr. Windheim is the general partner.

Joining Mr. Windheim from Global Fixed Income are Patricia Arcoleo, formerly manager in charge of fixed income, and Geraldine Boyle, formerly manager of operations.

Among Mr. Windheim's reasons for leaving Global Fixed Income Advisors — a wholly owned subsidiary of the Prudential Insurance Co. of America — was a desire to have an ownership stake in the business.

"I had a desire to be more than just an employee," he said.

According to Mr. Windheim, he proposed to Prudential that the investment unit be changed to a limited partnership with Prudential as a limited partner and him as general partner, controlling the business and the investment style.

The offer was declined.

"I then approached this other firm, and they welcomed the proposal," he said. "Prudential did have the first opportunity."

Timothy Biggs, a spokesman for Prudential Asset Management Group, declined to discuss the circumstances of Mr. Windheim's departure or identify clients that left Global Fixed Income Advisors for Strategic Fixed Income.

The parent company, however, has been in touch with its clients about Mr. Windheim's departure, according to Mr. Biggs.

"We're telling (clients) we're confident GFIA will remain among the largest and most competitive international investment management firms, using a prudent philosophy and investment process carried out by seasoned professionals," Mr. Biggs said.

Mr. Windheim, 32, joined Prudential in 1981 when Global Fixed Income was a $50 million pilot program. He assumed responsibility for the unit in 1984 when the firm had $250 million of assets under management.

When Mr. Windheim left at the end of May, the firm managed $5 billion in assets.

John Brookmeyer, chief investment officer of Prudential's Capital Management Group, of which Global Fixed Income is a part, will oversee the unit, according to a Prudential spokesman. ■

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CORRECTIONS & CLARIFICATIONS

• The equity/fixed-income breakout of **N.M. Rothschild International Asset Management Ltd.**'s international assets in the May 20 issue was incorrect. The firm has $28 million in international equity and $420 million in international fixed-income assets.

• **Sun Life of Canada**'s assets were misreported on the May 20 listing of the largest 100 managers in the United States. The correct total is $28.613 billion.

• **Prudential Diversified Investment Strategies** misreported its total U.S. institutional discretionary tax-exempt assets for the May 20 issue. The firm has $1.374 billion.

• The asset mix of **First Pacific Advisors Inc.** was printed incorrectly in the May 20 issue. The correct asset mix is 60% stocks, 14% bonds and 26% cash.

• **BEA Associates** was listed incorrectly on the Top 100 Managers by Total Discretionary Assets in the May 20 issue. BEA, with $9.506 billion under management, would not have made the Top 100. **Duff & Phelps Investment Management Co.**, with $10.437 billion, moves onto the list.

• The following profiles were omitted inadvertently from the May 20 directory.

HGK Asset Management Inc.

17 State St., New York, N.Y. 10004; (212) 514-9800

Total assets managed	$750,000,000
Total discretionary	$750,000,000
Total tax-exempt assets	$750,000,000
Total discretionary tax exempt	$750,000,000
Tax-exempt clients	81
Types of accounts managed	CGJ
Minimum separate account	$1,000,000
No. of portfolio managers	8

HGK Asset Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is to invest in companies selling at depressed prices relative to historical earnings growth, incorporating valuation criteria based on price-to-book, price-to-sales, price-to-cash flow and p/e ratios.

Its fixed-income approach is based on interest rate anticipation and sector analysis. Volatility is controlled by limiting the average duration and maturity of portfolios.

The asset mix as of Jan. 1 was 30% stocks, 65% bonds and 5% cash.

Warren A. Greenhouse is chief investment officer and client contact.

Meridian Management Co.

1200 Plaza West Building, Little Rock, Ark. 72205; (501) 663-7055

Total assets managed	$151,000,000
Total discretionary	$147,000,000
Total tax-exempt assets	$150,000,000
Total discretionary tax-exempt	$146,000,000
Tax-exempt clients	15
Types of accounts managed	CEF
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	1

Meridian Management Co. is an active equity and fixed-income manager.

Its equity approach is value-oriented and contrarian, keyed to buying deeply discounted stocks of viable companies. It stresses undervalued sectors, industries and issues that typically sell below book value and at relatively low multiples of earnings power.

The fixed-income strategy emphasizes undervalued securities and sectors investing in either high-grade or lower-grade issues depending on where the best opportunities exist.

Its asset mix was 91% stocks, 7% bonds and 2% cash.

Lee Bodenhamer is chief investment officer; Fred Burns is client contact.

• The chart of the Top 25 insurers in the May 20 issue was incorrect. The corrected chart follows.

25 largest insurers

Firm	$ mils.
Prudential	93,628
Equitable Life	70,814
Metropolitan Life	64,086
Aetna Life	45,196
Pacific Mutual	34,079
New England	30,275
CIGNA	28,409
John Hancock	24,165
Travelers	21,659
Principal Financial	21,506
New York Life	18,645
Transamerica	17,038
Primerica	15,783
USF&G	14,705
Massachusetts Mutual	14,531
Lincoln Nat'l	13,108
Kemper	9,907
Marsh/McLennan	8,031
Provident Nat'l	7,833
Great-West Life	7,547
MONY	7,524
Continental Assurance	6,486
Nationwide Life Insurance	6,460
Hartford Life	6,300
Mutual Benefit Life	6,105
Total	555,733

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Equity and fixed income performance based on Employee Benefit Bond Funds. Source: SEI

MONEY MANAGERS

Investment makes soaring return for Minnesota firm

■ Investments made in the Minnesota peregrine falcon market have paid off in big returns of nesting birds of prey for Peregrine Capital Management, Minneapolis.

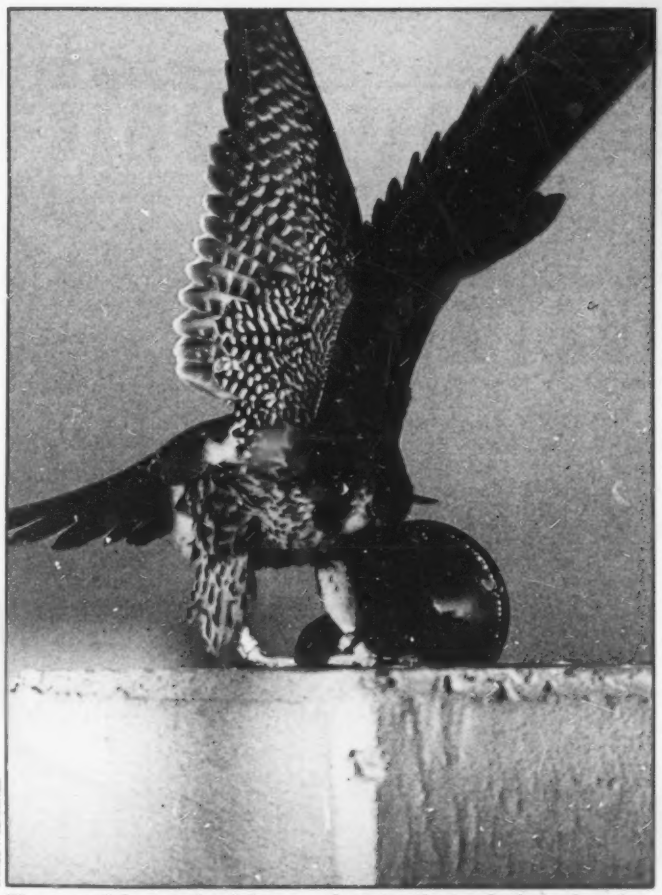
The partners picked the name at the firm's inception seven years ago, after researching the falcon and its habitats. "We chose the name Peregrine for all that the bird represents: It is a very strong bird, not the biggest in its class, but agile and very efficient. It was also almost extinct and making a comeback," said Bob Mersky, president.

Peregrine was formed by members of a bank trust department, and Mr. Mersky indicated the firm wanted to emphasize the idea of a renaissance from the troubled times bank trust departments were then experiencing.

The firm became a major sponsor for the Minnesota Peregrine Project, part of a nationwide effort to reintroduce peregrine falcons after the wild population was decimated by the widespread use of DDT in the 1950s.

The program of peregrine releases has been extraordinarily successful in Minnesota. The falcons are very territorial; the Twin Cities region would normally support just one breeding pair. But birds released in Minneapolis and St. Paul have returned every year since the project began in 1982, and this year have established five nest sites on city high rises, surrogates for the cliffs traditionally used.

"It's a great feeling to see the falcons flying free in downtown Minneapolis and St. Paul and on the river bluffs of the Mississippi," Mr. Mersky said.



JAMES T. JENNINGS

The graceful peregrine falcon — almost extinct only three decades ago — is soaring again over the skies of Minneapolis-St. Paul thanks in part to the support of Peregrine Capital Management.

Rodney Mitchell, left, John Segner and Wayne Nance are executives of The Mitchell Group, which focuses on energy stocks.

INVESTING

Adviser fired up on energy stocks

■ Rodney B. Mitchell, founder and former president of Tallasi Management Co., New York, now is combining his knowledge of the oil business with his portfolio management experience.

He has formed The Mitchell Group, Houston, believed to be the only investment management firm focusing exclusively on publicly traded energy stocks, which account for 13% of the Standard & Poor's 500 Stock Index.

Mr. Mitchell believes such a strategy is less complicated for institutional investors than direct oil and gas investments. He said energy equities provide several advantages over direct deals, including liquidity, the opportunity to acquire assets at a lower cost, diversification by property and asset class, measurable performance standards and lower management fees.

Also, said Mr. Mitchell, the quality of energy properties is likely to be higher. "The cream of the properties are kept by the energy industry."

As for why to invest in energy, Mr. Mitchell said: "We have just gone through a major inflection point in the dynamics of world energy markets. During the 1980s, consumption declined and non-OPEC production increased. In the '90s we will see the flip side. . . . As a result, we are looking for a significant increase in real energy prices in the 1990s."

Mr. Mitchell said the idea of an energy equity manager fits the need for diversification by institutional investors.

REAL ESTATE

Recession adds to vacancy woes

■ The nation's economic recession worsened the office vacancy rate in major cities during the first quarter of this year.

The vacancy rate in major cities rose to 18.2% as of March 31, from 17.6% at the end of 1990, according to a survey by Cushman & Wakefield Inc., a New York-based real estate services firm.

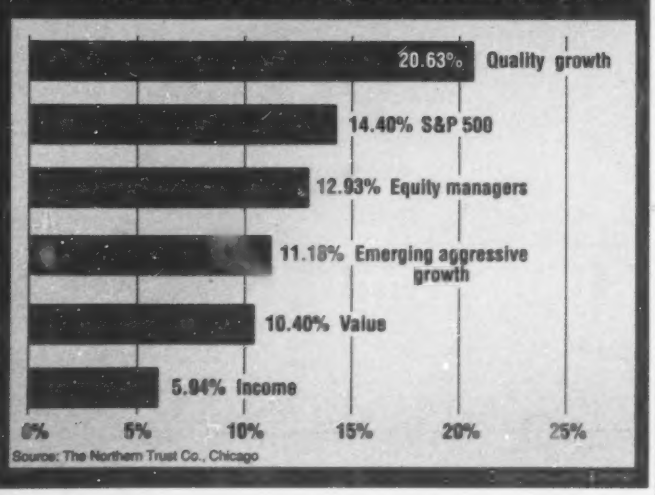
Chicago had a vacancy rate of 17%; New York City midtown, 17.4%; and Los Angeles, 21%, the survey found.

The suburban office vacancy rate is worse, rising to 21.5% at the end of the first quarter from 21.1% at the end of 1990, the survey found.

Los Angeles was the only major city to have significant new construction. Nearly 2 million new square feet of space was added to the city in the first quarter.

TNT equity manager universe

(Median returns for 12 months ended March 31)



Source: The Northern Trust Co., Chicago

BENEFITS

Costs continue upward spiral

■ Companies generally have held a steady course in selecting assumptions to calculate and report their pension obligations and funded status, according to two new surveys from The Wyatt Co.

Meanwhile, post-retirement benefit costs continue to rise.

In a survey of trends in actuarial assumptions, 85% of the 809 plans surveyed covering 1,000 or more participants have assets at market value greater than the actuarial value of all accrued benefits. This was an increase from 82% of plans in 1989, according to Wyatt's 1990 Survey of Actuarial Assumptions and Funding.

In a separate survey — Accounting for Pensions and Postretirement Benefits, based on analysis of annual reports from Fortune 500 companies — companies reported an expected rate of return on plan assets averaging 9.22%, with only 13% of industrial companies and 21% of service companies increasing their assumptions in 1989.

While 70% of the 438 industrial companies surveyed provide post-retirement medical benefits, only 7% pre-fund these benefits. While 71% of 126 top service companies offer these benefits, only 7% pre-fund.

Rising medical costs and a decrease in the ratio of active workers to retirees hiked the average cost of retiree medical and life insurance expenses per active employee by 10% to $660 for industrial companies in 1989. Average costs increased 24% for service companies.

Largest pending acquisitions

(as of March 31)

Buyer/seller (Divestiture, if applicable)	Purchase price ($ mils.)
[illegible]	[illegible]
Community Psychiatric Centers/Charter Medical Corp.	1,100.0
General Electric Co./Carter Hawley Hale Stores Inc. (Credit card operation)	[illegible]
Broken Hill Pty. Co. Ltd./Hamilton Oil Corp.	525.3
Nerco Inc./Union Texas Petroleum Holdings Inc. (U.S. offshore oil & gas business)	[illegible]
Murphy Oil Corp./Ocean Drilling & Exploration Co.	388.2
[illegible]	[illegible]
Libra Invest & Trade Ltd./Henley Group Inc.	326.0
Rochester Telephone Corp./Comsat Corp. (Local telephone operations in Minnesota and Iowa)	[illegible]
IE Industries Inc./Iowa Southern Inc.	256.7

Source: W. T. Grimm & Co., affiliate of Merrill Lynch Business Brokerage and Valuations

MERGERS & ACQUISITIONS

Volume hits 11-year bottom mark

■ Volume of mergers and acquisitions announced in the first quarter reached an 11-year low, with 438, down from 537 a year earlier, according to W.T. Grimm & Co. and Merrill Lynch Business Brokerage and Valuation.

The quarter continued the slide experienced in all of 1990, when potential deals dropped 12% from 1989. The first-quarter record was 829, set in 1985.

The decline in reported activity finally reached the smaller, under $50 million segment, which held its own throughout 1990. There were 107 announced offers valued at $50 million or less in 1991's first quarter, off 37% from the 1990 period.

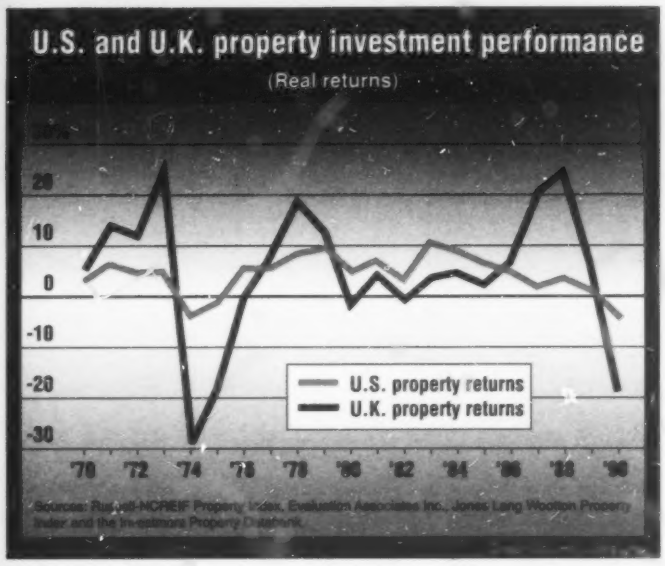
Overall, the average transaction price announced in the first quarter was $79.9 million, down 28% from $110.4 million in the year-earlier period, while the median price was up 7.6% to $22.6 million from $21 million in the 1990 quarter.

The number of megadeals continued to fall, with 34 proposed $100 million-plus deals in the first quarter of 1991, down 38% from a year earlier. Only two deals of more than $1 billion were announced, down from five in the first three months of 1990.

Divestitures accounted for about 46% of the announced transactions in both the 1991 and 1990 first quarters.

REAL ESTATE

Baring sets fund to nibble at U.K. property market



■ Baring Institutional Realty Advisors, New York, expects to close by year end its first real estate fund bankrolled by U.S. investors for investment in the United Kingdom.

The fund will be small — $37 million, possibly more — said Robert I. Houston, a principal with Baring, Houston & Saunders, London, an affiliate of Baring Institutional Realty. Five to seven investors — including public and corporate pension funds and an endowment — are likely to be in the fund.

All but a few U.S. investors have shied away from international real estate.

One reason some investors are moving into international is that England's property market has "definitely bottomed," said Mr. Houston. At 9%, yields on U.K. properties are as high as they are likely to get in the foreseeable future, he said.

INTERNATIONAL

Dollar erodes global gains for some

■ World markets boomed in the first quarter, but the dollar's rebound eroded returns for unhedged U.S. investors, especially against European currencies, according to Morgan Stanley & Co., New York.

The Morgan Stanley Capital International Europe Australia Far East Index rose 14.2% in local currency terms in the quarter, but only 7% in U.S. dollar terms. European markets alone rose 16.1% in local currencies, 4.1% when translated into dollars. The MSCI World Index was up 13.8% in local currencies, 9.3% in dollar terms.

Among developed markets, Sweden was the quarter's top performer in local currency terms, up 29.2%; its return in U.S. dollars terms was 19.3%. Far East markets saw less effect from exchange rates. Hong Kong was the top performer in U.S. dollar terms, with a gain of 24.4%; its gain in local currency was 24.3%.

Emerging markets also had a stellar quarter. The MSCI Emerging Markets Free Index, tracking the 12 developing markets where a substantial portion of shares is available to non-domestic investors, rose 39% in local currency terms and 28% in U.S. dollar terms in the quarter. Argentina was the top performer, up 204% in local currency and 78% in U.S. dollars.

WASHINGTON

Sloan, 4 others selected for ERISA Advisory Council

■ Maceo K. Sloan, president and chief executive officer of burgeoning minority-owned NCM Capital Management Group Inc., Durham, N.C., has been named to represent investment managers on the ERISA Advisory Council.

The council, which formerly was known as the Advisory Council on Employee Welfare and Pension Benefit Plans, consists of 15 private-sector experts who advise the Secretary of Labor on benefit issues.

Other professionals named to the council for three-year terms were:

- Edwin M. Jones, a former executive director of the Pension Benefit Guaranty Corp. and now a partner in the law firm of Bentley, Moser & Babson, Stamford, Conn., representing the public;
- Edward R. Mackiewicz, a former PBGC general counsel who now is fund general counsel for the Masters, Mates and Pilots Plans, Linthicum Heights, Md., representing multiemployer plans;
- Janae L. Schaeffer, a member and shareholder in the law firm of Jolley, Walsh & Hagar, Kansas City, Mo., representing employee organizations; and
- Ronald D. Watson, president, chairman and chief executive officer of the Custodial Trust Co., Princeton, N.J., representing the corporate trust field.

M. Sloan

RATINGS

Japanese join credit research field

■ America's crowded rating agency business should brace itself for some Japanese competition.

The Japan Bond Research Institute, one of three Japanese rating agencies, has just become a registered investment adviser, which is required by the Securities and Exchange Commission for foreign rating agencies.

The institute also has applied to the SEC to be a nationally recognized statistical rating organization, which would place it with four U.S. agencies and one British firm, according to Minoru Akine, managing director.

JBRI hopes to rate Japanese companies issuing debt in the U.S. market alongside the New York-based industry leaders, Standard & Poor's Corp. and Moody's Investors Service. It also expects increased demand from U.S. investors for ratings of Japanese companies.

"Since April of 1990 when the SEC opened the door by inaugurating the 144A market, we've had a good opportunity to come to the U.S. market. The 144A market was designed to invite Japanese Euromarket issuers to the Yankee market," said Masumi Oga, senior analyst.

While U.S. rating agencies tend to be investor oriented and, therefore, harsher in their ratings, JBRI claims to be neutral, serving both issuers and investors.

The institute is offering credit reports free to U.S. investors, but eventually it plans to charge fees for the reports.

"In the future we would like to rate U.S. companies. For now, we want to issue reports to U.S. investors on bonds floated by Japanese corporations in the U.S. market," Mr. Oga added.

FINANCING

Companies work at drawing crowd

■ One of the single greatest challenges of running a public company is to attract analysts and new investors, a survey of chief executives of newly public companies found.

Prior to the offering, their biggest problem was controlling expenses, according to the survey by Standard & Poor's Corp. and Edelman Public Relations Worldwide, both in New York.

The survey also found new issues are seeking global attention.

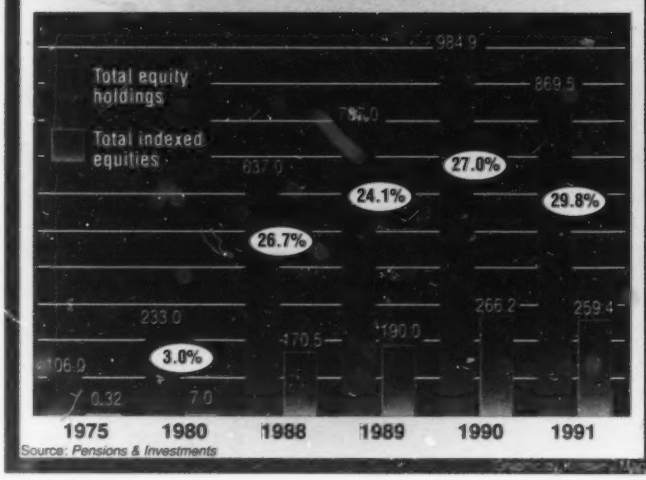
Officials of 55% of the companies that did IPOs last year went offshore to meet investors during their road shows. Only 20% of the companies, however, continue to communicate with their overseas investors or analysts now that they are public companies.

"It's striking that top management of newly-minted IPOs acknowledges the importance of providing guidance to Wall Street, and yet over one-third . . do not regularly brief securities analysts and half of them fail to establish relationships with the financial press," said Robert Hubbell, senior vice president and managing director of Edelman's financial relations division.

Some 50% of chief executives of 1990's IPOs believe they are not adequately followed by securities analysts, and two-thirds said they find it difficult to attract analysts and new investors.

Pension funds' indexed equity holdings

($ billions)



Source: *Pensions & Investments*

TRADING

No excuses for not using minorities

■ "Phooey."

That is Norma Yaeger's response to international investment managers who say they are unable to find women- or minority-owned brokers in the United States to execute and clear trades of foreign securities.

That person, according to Ms. Yaeger, is "living in yesterday's world."

Norma Yaeger says it's relatively easy for a broker to execute international trades.

And Ms. Yaeger ought to know. She is the president of Los Angeles-based Yaeger Securities, a firm that she founded 10 years ago.

Yaeger Securities, through a correspondent relationship with Wertheim Schroder, can execute trades on exchanges in London, Tokyo and Hong Kong and other foreign cities.

The $30 billion California State Teachers' Retirement System threw out applications from 91 international money managers because more than half failed to comply with the state's 1989 affirmative action law.

California requires the investment management firms it employs to make a good-faith effort to subcontract with minority- and women-owned firms.

With today's communications technology, an international broker can execute a trade of its domestic issues through a U.S. broker with no greater difficulty than it takes to make a long distance telephone call, according to Ms. Yaeger.

"Most of the time, they have correspondents here in the United States," she said.

"It doesn't matter if I'm sitting in Japan, London or Amsterdam."

Chaos theory weakens efficient market idea

By Richard A. Crowell and Edgar E. Peters

For 39 years, investment analysis has been dominated by the concept of efficient markets and its corollary, random walks. But these concepts of modern portfolio theory and the statistical analysis tools underlying them — specifically normal probability distribution and variance as a measure of risk — are being challenged by the new sciences of complexity, often referred to as chaos theory.

Trends and cycles in markets, not possible under the efficient market hypothesis or in random walks, exist in the statistical analysis related to fractal geometry, a part of chaos theory. Characterized by long-memory effects, fractal distributions suggest the impact of one day's events can influence the future for months or even years. Thus, chaos finds the evidence of trends and cycles.

If the markets are fractally distributed rather than normally distributed, a substantial portion of popular statistical analytical tools is considerably weakened, particularly because of "long-memory" effects. That variance is no longer defined also brings into question much of modern portfolio theory, which generally uses variance as a measure of risk.

The efficient market hypothesis in its widely held "armistrong" form says securities prices reflect all public information and thus prices can't be gamed for profit. Returns follow a random walk; successive changes in price are independent of previous changes. The probability function of market returns, in short, is thus a normal distribution.

This bell-shaped distribution permits a wide battery of statistical tests and modeling techniques, so commonly used by portfolio managers and academics. But these tests and models are valid only if returns are normally distributed, or at least independent, as in the random walk.

The description of returns as normal or "approximately normal" persists to this day, even though persuasive evidence has been building in the past 30 years that actual market returns aren't normally distributed. The frequency distribution of returns has a higher peak at the mean and fatter tails than normal distribution.

In 1962 Benoit Mandelbrot, the father of fractal geometry, suggested that market returns might be better described by self-similar probability distributions. By self-similar, we mean at different increments of time the statistical characteristics are the same.

Thus, for example, the characteristics for monthly returns would be the same as those for daily returns. These self-similar probability distributions, called fractal distributions have, like the distribution of actual returns, a high peak at the mean and fat tails.

An important characteristic of fractal distribution is its long-memory effect, causing trends and cycles. There will be long-run correlations between observations. These cycles will be non-periodic, however. This is, they will not repeat themselves precisely each time.

In fractal distributions, variance becomes infinite, or undefined. It is, therefore, unstable. Large changes tend to be abrupt and discontinuous. In normal distribution, a large change occurs through a large number of small changes.

When Mr. Mandelbrot originally proposed the fractal analysis, there was widespread debate that finally ended inconclusively because a fat-tailed normal distribution could not be distinguished from a fractal distribution. Further proof was necessary before discarding a large body of work based upon normal distributions and random walk.

Such proof is now available, and its implications are both exciting and frightening. It points to the need for widespread change in the current paradigm of modern portfolio theory to a non-linear view of how markets work.

Applying a methodology originally proposed by Mr. Mandelbrot to various capital market and economic time series found virtually all capital market series that we have studied exhibit fractal statistics. That is, they are characterized by long-memory effects. In addition, the cycle length of the system, or the length of the memory effect, can be determined. For the Standard & Poor's 500 Stock Index, we found prices increase with the 0.78 root of time, and memory length is about four years. This memory length was independent of the period of the data; that is, daily data, monthly data and quarterly data exhibit the same four-year cycle.

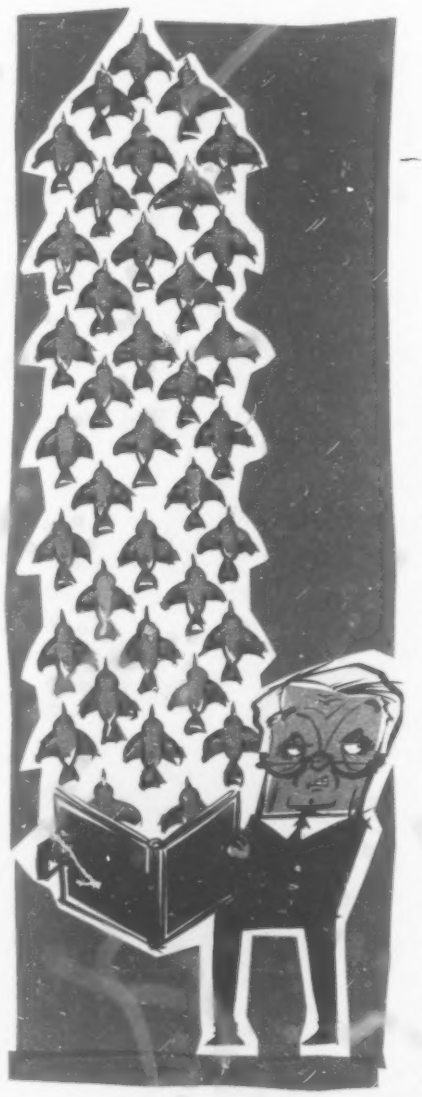
The implications of these results are exciting, because they explain why certain strategies, such as tactical asset allocation and value investing, have added value when they should not in an efficient markets framework.

However, the results are frightening because much of the analytic framework that investment finance has applied needs to be seriously revamped. Diagnostic tools useful in a linear regression framework are seriously weakened in a long-memory framework. Finally, the capital asset pricing model, and similar pricing methods, will have to be re-evaluated.

The fractal hypothesis suggests possibilities that are much closer to practical experience. That is, trends and cycles can exist, and abrupt changes in prices are not only possible but likely.

These possibilities arise when the probability function is allowed to attain a more general form, rather than the restrictive form of the normal distribution. The math becomes more difficult. But the results are closer to reality, and the truth. After all, that is what we want.

We are finding some other useful application. Contrary to the efficient market hypotheses, we found the stock market's statistical characteristics behave in certain ways prior to a downturn. We also can determine when the markets are in a trend reinforcing phase due to strong momentum. Unlike technical indicators that use charts, these momentum indicators are statistical, and give us a measure of market risk that is tied to an acceptable body of theory. ■



JOE FOURNIER

Richard A. Crowell is managing director and Edgar E. Peters is senior manager-asset allocation at PanAgora Asset Management, Boston. Mr. Peters is author of "Chaos and Order in the Capital Markets," to be published in the fall by John Wiley & Sons Inc., New York.

LETTERS TO THE EDITOR

A separate profile

■ In *Pensions & Investments*' May 20 directory of investment managers, ASB Capital Management Inc.'s information was combined in Security Trust Co.'s profile.

As of Jan. 1, ASB Capital Management had $8.3 billion under management, of which $6.7 billion was discretionary, tax-exempt.

ASB Capital Management is an active and passive equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach is oriented toward relative value. Attractive securities are identified by quantitative ranking of value and fundamental factors. Sector emphasis is made accordingly.

Its fixed-income approach combines maturity and sector shifts, interest rate anticipation, swaps and arbitrage, and timely selection of issues.

For real estate, the firm invests in high-quality, income-producing properties constructed with union labor, through participating and convertible mortgages and joint ventures.

Terence W. Collins
President
ASB Capital Management Inc.
Washington

Batterymarch rises in ranks

■ Cash that was held in accounts mandated for international equities was left off Batterymarch Financial Management's reply for the May 20 investment manager profiles.

Our actual international total is $1.826 billion, of which $1.566 billion is in international stocks and $260 million is in international cash.

We should have placed 18th, instead of 23d, out of the 25 largest managers of U.S. assets invested abroad.

Kenneth Slovin
Batterymarch Financial Management
Boston

Editor's note: As a result of Batterymarch's revision, the international assets for the 25 largest managers of U.S. assets invested abroad now total $70.064 billion, instead of the $69.804 billion reported in the table on page 18 of the May 20 issue of Pensions & Investments.

Messy mishap

■ Due to an error on my part, Hyperion Capital Management Inc. didn't get listed in your May 20 issue. I misplaced your investment adviser questionnaire on my messy desk.

Hyperion Capital Management had a total of $1.2 billion under management as of last Jan. 1 (we have since grown to $1.65 billion), with $540 million of this coming from U.S. tax-exempt insitutional clients.

I look forward to being timely with your questionnaire next year.

Christopher J. LaCroix
Managing director
Hyperion Capital Management Inc.
New York

Institutions snatch up offerings

By Marlene Givant Star

NEW YORK — Feeding the corporate new issuance frenzy during the first quarter, institutional investors purchased an unprecedented amount of both debt and equities, rather than favoring either of the two instruments.

Falling interest rates bolstered both the stock market and the value of trading in institutional corporate bonds.

"In terms of net activity, institutional investors showed a much stronger interest in NYSE stocks this year relative to last year, while retail investors turned to selling once again," said a Securities Industry Association report.

Net purchases by institutional investors swelled to a record 2.9 million shares daily in the first quarter of 1991, a more than 14-fold increase from 200,000 shares daily in 1990. The previous record was 2.8 million shares daily set in 1987.

In the first quarter, institutional net bond purchases surged more than 50% to $1.4 billion daily, compared with the year-earlier quarter's $910 million. The figure was more than two-thirds higher than 1990's daily average of $843.1 million and the highest since 1986 when the figures were first tracked by the SIA.

Stock volume, at 195 million shares daily, was the second highest ever, topped only by 1987's fourth-quarter average of 213 million shares daily, a quarter of sharply falling prices. This quarter, in contrast, prices posted their strongest quarterly gain since the first quarter of 1987, rising nearly 14%.

Smaller stocks had their best quarter ever, gaining 29% in the first quarter, as measured by the National Association of Securities Dealers Automated Quotation system. Volume was a record 161 million shares, surpassing the previous peak of 154 million shares traded daily on average in the first quarter of 1987.

So far in the second quarter, companies are continuing to take advantage of attractive terms, bringing equity offerings to market to improve balance sheets.

If the trend continues this quarter, "this is certainly the healthiest development for both our capital markets and the securities industry over the last several years," according to Jeffrey M. Schaefer, senior vice president, and Grace Toto, research associate, co-authors of the SIA's Investor Activity Report.

In April alone, 29 initial public offerings came to market, according to IDD Information Services Inc., New York.

In the first quarter, debt and equity underwriting exceeded $100 billion for the first time, reaching $108 billion, compared with a 1990 quarterly average of $73 billion to $84 billion, the report said. Most of the gain was attributable to surges in corporate and mortgage-backed debt issues.

The reason institutional investors bought stocks and bonds was because they wanted to lower their cash positions dramatically, particularly as short-term interest rates declined, according to the report. ■

Institutions go on buying spree

* First quarter
Source: Securities Industry Association, Washington

Graphic by Kimberly Mart

South African ADRs spark resolutions at depositories

By Terry Williams

NEW YORK — The American depository receipt commingled fund being marketed by the Bank of New York to its master custody and master trust clients will not include ADRs of South African companies, although the bank is one of the largest depositories for the securities.

"There are no South African ADRs (in the commingled fund), and we do not purchase any," said Mike Pascale, a bank spokesman.

ADRs of South African companies have become an issue recently as shareholders of bank stocks have put forth resolutions asking the banks to cease servicing the securities.

In late April, J.P. Morgan announced it was withdrawing from the business of processing ADRs of South African companies. The company had been the target of a campaign by the Amalgamated Clothing and Textile Workers Union, AFL-CIO, pressuring it to withdraw.

In its proxy sent to shareholders, Chemical Bank said it would cease its processing of unsponsored ADRs of South African companies by June. Last year, Security Pacific Corp. dropped its business processing ADRs of South African companies.

Bank of New York's involvement is strictly as a depository for ADRs of South African companies issued prior to 1986, an activity permitted under federal anti-apartheid legislation passed in 1986, according to Mr. Pascale.

Spokesmen for the Bank of New York and Citibank, another large depository for the ADRs of South African companies, acknowledge they had not disclosed their South African ADR activities to clients, but noted the banks had not tried to hide it either.

The New York-based Interfaith Center on Corporate Responsibility, a coalition of 250 religious investors, filed resolutions on the annual meeting proxies of Chemical Bank, Citicorp, Chase Manhattan Bank, Bankers Trust, Manufacturers Hanover Trust Co. and J.P. Morgan, according to Donna Katzin, director of South African programs with the center.

Municipalities also have begun to scrutinize ADRs, which anti-apartheid activists have described as "arcane" and "obscure."

New York City is expected to implement soon new regulations regarding South African activity, and ADRs, not a part of current regulations, will be included in the new ones, a spokesman with the city Finance Department said.

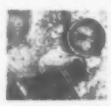
In April, legislators and anti-apartheid activists in Massachusetts asked State Treasurer Joseph D. Malone to investigate J.P. Morgan's South African ADR activities, before naming the bank to a general obligation underwriting syndicate.

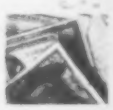
Some banks also face shareholder resolutions at their annual meetings asking them to sever correspondent banking relationships with South African banks, and not to exercise options to convert short-term debt of South African companies to 10-year loans.

Although none of the resolutions has passed, the attention they brought, combined with pressure from clients and anti-apartheid activists, have led some banks to drop the business.

In its case, according to a statement released by J.P. Morgan, the bank processed only unsponsored-ADR programs for pre-1986 shares of South African companies. (A sponsored ADR is one in which a bank has an agreement with the issuing company to be the exclusive issuing agent and depository. With an unsponsored ADR, a number of banks can serve as depository of the ADRs.)

However, "In deference to sincere and strongly held views on a uniquely sensitive issue, we decided to withdraw from the business of processing ADRs for South African shares," the Morgan statement said. ■





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Unity

Continued from page 2

Between 3 million and 4 million participants have lost federal government protection of their pension plans through the conversion of their benefits into insurance annuities, according to a recent study by the U.S. General Accounting Office, Washington. The study was requested by Sen. Donald W. Riegle Jr., D-Mich., chairman of the Senate Committee on Banking, Housing and Urban Affairs.

"Although these annuitants are protected in general by the state guarantee system, some of them could lose all or part of their pension benefits should the insurance companies providing their annuities fail," the study said. Between January 1975 and December 1990, 170 life insurance companies failed. Of the total, 40% failed in 1989 and 1990, the study found.

Other congressmen who have expressed concern over problems posed by Executive Life include Sen. Howard Metzenbaum, D-Ohio, and Rep. Charles B. Rangel, D-N.Y. Sen. Metzenbaum, who is chairman of the Senate Committee on Labor and Human Resources Subcommittee on Labor, has scheduled a June 20 hearing on Executive Life; Rep. Rangel, who chairs the House Ways and Means Subcommittee on Select Revenue Measures, has scheduled a hearing June 27.

Overhanging the rehabilitation of Executive Life and the payment of participants' benefits is the Internal Revenue Service's $643 million lien for back taxes and penalties. If the IRS' claim is honored, payments to policyholders and annuitants would be killed and the insurer would be forced into liquidation, according to John Garamendi, California's insurance commissioner.

The new group representing defined contribution plan interests argues that while participants should be treated on the same basis as other annuitants, they should have priority status over holders of the $1.9 billion in municipal GICs purchased by state and local governments.

Some governments issued low interest bonds to fund public projects, investing the proceeds in municipal GICs issued by Executive Life. The difference in interest rates was to finance the projects and result in a profit, Mr. Garamendi has said.

In addition, the group has met with officials at the Department of Labor, the IRS and members of Congress to seek out ways for employers to cover participant losses and to discuss Executive Life's potential consequences on pension plan investments.

Recently, the Labor Department announced it would process on an accelerated basis employer requests to buy Executive Life GICs from their pension plans. Such a transaction is prohibited under the Employee Retirement Income Security Act of 1974.

The pension group would have preferred an advisory ruling affecting all employers, rather than requiring companies to make individual requests, said John J. Nestico, senior benefits counsel for Unisys Corp., Blue Bell, Pa., and a spokesman for the group.

"Under the circumstances, we've got a huge nationwide problem here, and to me that's not very responsive," Mr. Nestico said. Some 150 companies are invested in Executive Life GICs. Executive Life, Los Angeles, a unit of First Executive Corp., was placed in conservatorship April 11.

The coalition also is seeking a ruling from the IRS permitting participants to roll over supplemental distributions from Executive Life contracts into a tax-deferred vehicle such as an individual retirement account, without taking a tax hit.

But the issues posed by Executive Life could have far-reaching consequences for defined contribution plan investments and the economy overall if participants suffer losses, pension executives fear.

Participant losses could drive defined contribution plan assets from the popular GIC option to lower-risk, government securities, reducing retirement income and shrinking cash flows into insurance companies that reinvest the money into the economy, Mr. Nestico said. "It's going to take a lot of money from the underlying economy," he said. ■

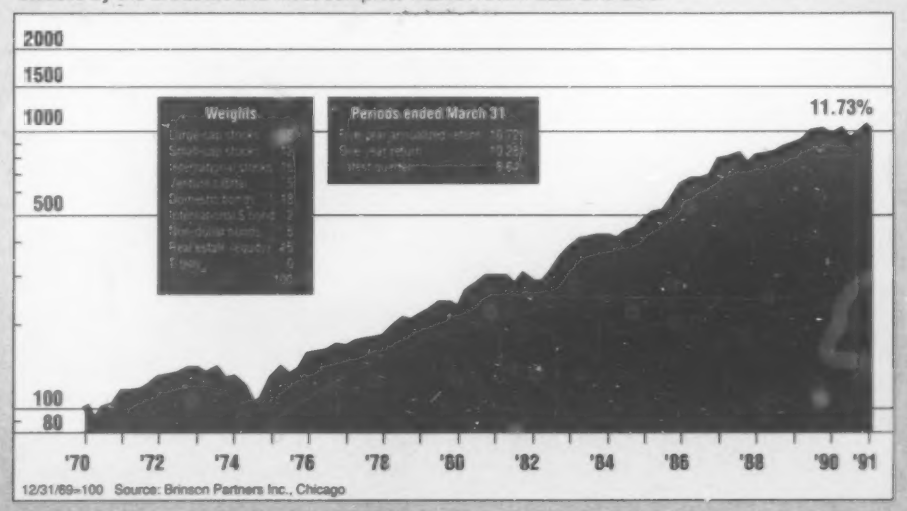
Group Annuity Participant Protection Association

Alcatel
Amdahl
Ampex
Bayer USA
BW/IP International
Clarke American Checks
Drake Bakeries
Freudenberg-NOK
Haynes International
Hilti
Holiday Inn
Honeywell
Inland Container
International Paper
Ralston Purina
Simplex Time Recorder
Sperry Marine
Unisys
Wilson Sporting Goods
Woodward & Lothrop
Xerox

This is a corrected version of the Multiple Markets Index that appeared in Statistically Speaking May 13.

Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.



Graphic by Cynthia Watson

Demands

Continued from page 1

elect two new outside directors to the nine-person board and to create a stockholders' advisory committee made up of three outside directors to meet quarterly with a committee of major institutional shareholders.

The agreement didn't come a moment too soon. Standard Brands Paint was one of eight companies targeted in the second phase of a letter-writing campaign by the California fund, which threatened to vote against the slate of directors of companies it considered to be poor performers.

"This company has been poorly performing. This is an attempt to get some input and direction for the company," said Richard Koppes, general counsel of the California fund.

Standard Brands Paint, which operates 134 stores in the West, has been squeezed ever since it incurred almost $200 million in debt to repurchase 6 million shares of common stock in 1987 to fend off a takeover attempt.

When Transamerica and SunAmerica lent the company $139 million, they received preferred stock, according to Craig Walker, vice president-communications of Standard Brands Paint.

"Under the new agreement, we could sell our 19 Texas properties at less than 1987 appraised values (contrary to the covenants' stipulation). That was our sweetener. The lower conversion price on the preferred stock was (the senior lenders') sweetener," said Mr. Walker. Lowering the conversion price increases the lenders' upside potential if the common stock rebounds.

While Standard Brands Paint missed no interest payments, it was in violation of certain covenants governing financial performance prior to the agreement reached with lenders.

Allen and DLJ were hired to help the company restructure the remaining $27.5 million in debt outstanding with Security Pacific. In 1987, the company borrowed $60 million in an unsecured working capital loan and an employee stock ownership plan loan from the bank. The company hopes to replace the bank's money with another source of capital by the end of the summer.

Standard, which has had deteriorating earnings in recent years, hopes to raise $20 million from the sale of its Texas sites to pay down senior debt. The company lost $1.53 a share last year, including restructuring charges, on revenue of $294 million.

In exchange for their concessions, the senior lenders received the option to extend the secured senior debt for three additional years, to 2000, and will be exchanging $16.25 million in Standard's Series B preferred stock for two new issues of preferred stock worth the same amount. The new Series D and E shares will pay the same 10% dividend, but the lenders will be able to convert the Series D shares into 996,890 common shares at $7.97 a share. The conversion price on the Series B shares had been $16.30. The Series E preferred dividend rate will increase 50 basis points each quarter beginning June 1, 1995.

The decisions to expand the board to 11 members from nine and adopt a shareholder advisory committee were called an "accommodation" with shareholders. Under the expansion, two outside directors would be elected. The stockholders' advisory committee, composed of three outside directors, will meet at least quarterly with institutional shareholders and provide them "with a forum for expressing their views on the company's future strategic direction," Mr. Walker said.

The election will take place at the company's annual meeting, changed to July 12 from May 24.

"The company was faced with a series of problems. Its performance has been deteriorating. There was a potentially disruptive proxy fight threatened, and common shareholders — although fairly concentrated — were unorganized. There was no forum for communicating effectively with the company," said David Eisner, senior vice president of Providence Capital, a New York investment bank acting as adviser to the institutional shareholders and some large individual investors.

In addition to the California fund and Husic, the top institutional holders of Standard Brands Paint are SunAmerica, with 4%, and Dimensional Fund Advisors, Santa Monica, Calif., with 3%.

Providence proposed a three-pronged solution on behalf of shareholders. The plan called for new independent representation on the board; a strategic review of businesses by an outside consulting firm; and formation of a shareholder advisory committee to allow large shareholders to more effectively communicate with management. Discussions with management had been going on since the beginning of the year, Mr. Eisner said.

Because the agreement was worked out with input from Mr. Latshaw, "there is unlikely to be a potentially disruptive proxy fight as a result. We worked quietly to facilitate communication between shareholders and the board of directors," Mr. Eisner said. ■

AT DEADLINE

Continued from page 1

Associates, Denver, was consultant.

The $293 million **University of Pittsburgh** endowment hired The Common Fund to manage $20 million in a commingled South Africa-free international equities fund.

The $150 million **Georgia Firemen's Pension Fund** hired Montag & Caldwell to manage a $36 million balanced account and Globalt to run $5 million in equities. Wellington Management was terminated. Southeastern Advisory Services was consultant.

Hicks, Muse snares veteran

Charles W. Tate, a 19-year veteran of Morgan Stanley, is joining Hicks, Muse & Co., a leveraged buy-out boutique as a partner and managing director, and will open a New York office for the Dallas-based firm.

Merus gets $250 million

In a move that positions Merus Capital Management as the North American investment arm of The Mitsubishi Bank, the bank has allocated to Merus $250 million formerly managed by Mitsubishi Bank Trust Co. of New York.

Canadian data universe set

InterSec Research will launch a comparative performance universe of 120 to 150 portfolios of Canadian pension funds and their money managers later this year.

Firm hires exec, opens department

LONDON — London & Bishopsgate International Inc., with offices in New York and London, hired an investment executive and formed a New York-based quantitative research department.

Herbert T. Hughes, co-founder and former president of Paramount Capital Group Inc., Stamford, Conn., is the new director of portfolio investments.

The research department is headed by Yiannis Koskosidis, former assistant professor at City University of New York. Other members include David A. Hanna, former investment analyst with Aetna Life Insurance Co., and Arthur D. Cashin III, former program analyst with First Boston Corp. ■

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June 24, 1991

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AT DEADLINE

Virginia reaches RF&P deal

The $12.6 billion Virginia Retirement System could be the sole owner of RF&P Corp. under a tentative agreement reached among the pension fund, the company and CSX Corp.

CSX will sell its 6.8 million RF&P shares to the company and the pension fund for $35 a share. RF&P will receive $135 million worth of stock in exchange for its railroad operations and certain other assets; the pension fund, which owns about 28% of RF&P, will pay CSX $104 million for the balance of its holdings.

Other shareholders, who own about 35% of the more than 17.6 million shares outstanding, can sell their stock back to RF&P for $39 a share. Afterwards, RF&P will be a real estate developer.

Landis Tool taps Hallmark

Landis Tool, a unit of Litton Industries, hired Hallmark Capital Management to run an $8 million equity account, replacing an unidentified firm.

National Steel shifts staff

National Steel named Richard Newsted, previously assistant treasurer, its new vice president, finance and treasurer. He replaces Larry Symons, who left the firm.

James Wainscott, former manager, pension and lease administration, was named assistant treasurer. William McDonough was named manager, treasury operations, and will add pension manager to his list of new duties. He was supervisor of treasury operations.

Oppenheimer picks chief

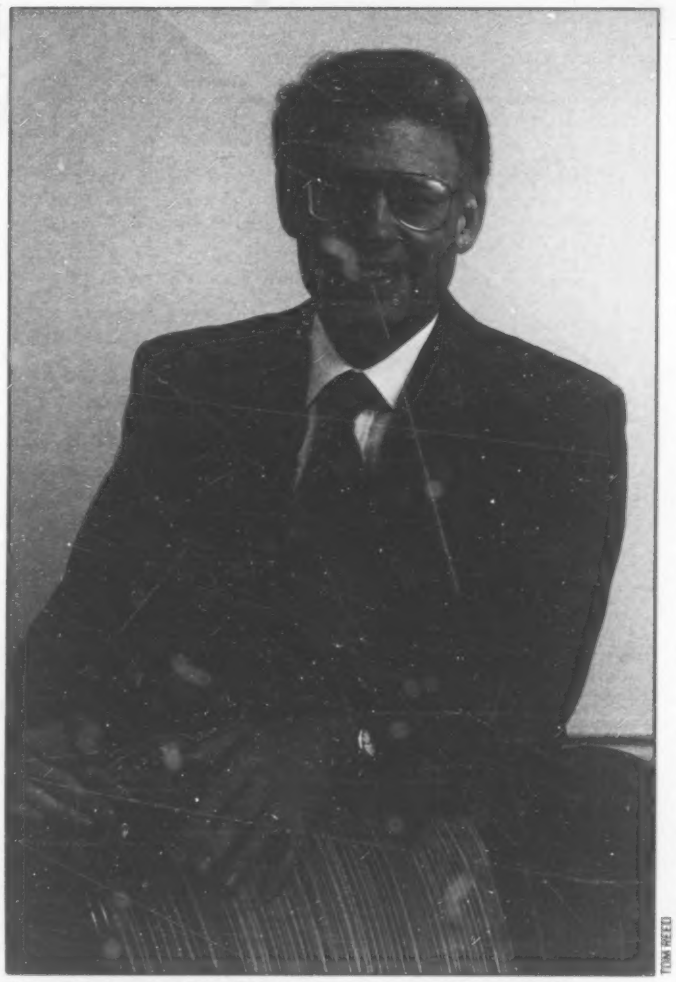
Bridget A. Macaskill, executive vice president and chief operating officer of Oppenheimer Management, was appointed the firm's president and COO.

INSIDE

GREG LOUDON

Guarded by thin shields

Corporate directors are not beyond the reach of legal action despite the safeguards adopted by corporations and states in the 1980s — opponents now are searching for loopholes. See Commentary, Page 16.



TOM REED

George F. Russell Jr. picked 20 pension executives and 20 money managers to explore emerging market investments.

Russell group aims for Eastern Europe

By Margaret Price

Pension fund executives from AT&T Co., General Motors Corp. and IBM Corp. are among the participants in a group of 20 pension funds and 20 money managers exploring investment opportunities and issues in emerging markets.

The group — the Russell 20-20 — was established by George F. Russell Jr., chairman and chief executive officer of The Frank Russell Co., Tacoma, Wash. Its current focus is on Eastern Europe, where there are many "American roots" and where there is an "expectation that investment opportunities are much broader there than in most emerging markets at this time," said Mr. Russell.

Money managers participating include Capital Guardian Trust Co., Los Angeles; INVESCO MIM Inc., Atlanta; and the investment arm of the Prudential Insurance Co. of America, Newark, N.J.

Mr. Russell, executives of the three funds and three money managers comprise the group's seven-member executive committee. The group began meeting in November; its second session was May 23.

Its mission now is to probe social, economic and political issues in Eastern Europe to glean information that could help participants make successful, prudent investments in the region.

Although several participants said they doubt their organizations would make or expand investments in Eastern Europe in the near future, Mr. Russell was more positive.

"Things have already happened that I'm not at liberty to discuss. When you put 40 people . . . in a room together and expose them to the kinds of investment opportunities (that emerged) because the Berlin Wall has fallen, a lot will happen."

"The capital required to bring the Soviet Union and Eastern Europe to a minimum competitive level with . . . the developed world will be large, and the

See **Russell** *on page 33*

Time Warner's investors cagey

Will they exercise or sell rights?

By Barry B. Burr

Institutional shareholders, trying to come to grips with Time Warner Inc.'s proposed stock rights offering, are being cagey about whether they'll exercise their rights or sell them.

Engaging in a bit of gamesmanship, they don't want to tip off each other, because the ultimate terms of the deal — indeed whether the rights offering comes off at all — depend on how many shareholders subscribe to it.

The uncertain terms, meantime, have left passive investors such as index funds frozen, unable to know how the deal will change Time Warner's value in the Standard & Poor's 500 Stock Index and thus how to proceed to weight the stock to avoid any tracking error.

Since Time Warner announced the rights offering, its common stock has lost more than $1 billion in value. That is one-third to one-half of the potential proceeds the new equity issue would raise for the company.

For institutions, their share of that loss amounts to more than $600 million.

Pension funds and other institutions, including index funds, held 60% of Time Warner's 57.5 million outstanding common shares as of March 31, according to the 13(f) filings complied by CDA Technologies Inc., Rockville, Md.

The terms of the offering involve investors in a guessing game. Those deciding to use their rights will have to exercise them without knowing the price they will have to pay and, once exercised, without any opportunity to revoke their subscription.

"We don't want the other players to know if we feel positive or negative about the offering," said Thomas Pinto, assistant public information officer for the $83 billion Teachers Insurance and Annuity Association — College Retirement Equities Fund, New York.

"That could leave other investors with an idea we will or won't purchase any shares." The fund held some 661,000 shares as of March 31, according to CDA.

Other funds and money managers, likewise fearing they'll reveal their cards or be accused of trying to influence shareholders, declined to comment.

"We're waiting for the rights to start trading" to see what price the market places on the deal before making a decision, said a portfolio manager with a Florida-based investment adviser.

"A holder would definitely have to be a longer-term investor" if one were to find anything attractive about the offering, said Jim C. Goss, vice president, Duff & Phelps Inc., Chicago, stressing "longer term" since, in the short term, investors have seen the stock's value erode.

Geri Hom, vice president and manager-portfolio management, Wells Fargo Nikko Investment Advisors, San Francisco, said her firm will wait until the last possible moment before the expiration of the offering to exercise the stock rights for its S&P 500 index fund. The fund, she said, wants to keep pace with the index, as com-

See **Investors** *on page 37*

Chrysler shifts gears in medical program

By Fred Williams

HIGHLAND PARK, Mich. — Chrysler Corp. has restructured its medical care program for salaried employees by scrapping traditional health coverage in favor of a defined contribution approach.

Shifting to a defined contribution approach for retiree medical expenses allows Chrysler to remove medical inflation from the calculation of its total liability under the Financial Accounting Standards Board's Statement 106. The medical inflation rate is one of the major factors influencing the huge liabilities associated with retiree medical.

Chrysler, one of the first major companies to extend the concept of flexible spending for medical benefits to retirees, made the shift June 1 to try to gain control over mushrooming medical costs and reduce retiree medical expenses.

In revamping its health care program, Chrysler has made use of many available elements such as flexible benefits, a 501(c)(9) trust, the existing 401(k) plan and a system of insurance buybacks and credit carryovers. The idea is to shift a portion of the company's medical expenses to users while making the program attractive enough to encourage participation

See **Chrysler** *on page 39*

NEWS DIGEST

AP/WIDE WORLD PHOTOS

Basketball star Isiah Thomas, in blue, is part owner of Alpha Capital Management, a new minority firm that will get investment help from Munder Capital. Page 6.

SPECIAL REPORT: INTERNATIONAL

Overseas assets grew 22%, *P&I*'s annual survey of top international/global managers finds. Page 19.

FINANCING

Time Warner's rights offering has institutional investors playing their cards close to the vest. Page 1.

Foreign companies would find adding U.S. investors to rights offerings easier under an SEC proposal. Page 3.

INTERNATIONAL

AT&T, General Motors and IBM are participating in Frank Russell's emerging markets explorations. Page 1.

Canadian pension funds avoid a proposed tax on non-Canadian equity investments. Page 3.

REAL ESTATE

The Alabama and Houston Municipal funds have made separate golf course investments. Page 3.

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Real estate survey is under way

Questionnaires for *Pensions & Investments*' annual survey of the largest real estate investment managers are being mailed this week. The deadline for return is July 28. Please contact Christine Philip at (312) 649-5217 if you believe your firm qualifies for inclusion, but has not received a questionnaire.

Feds focus on annuities

Employers' selection of providers could be regulated

By Hillary Durgin

WASHINGTON — The Labor Department and the Pension Benefit Guaranty Corp. last week unveiled joint proposals governing employers' selection of annuity providers.

The proposals, scheduled for publication June 21, are a first step toward examining whether federal regulation would be necessary to establish minimum standards for annuity purchases, administration officials said at a hearing before a subcommittee of the Senate Committee on Labor and Human Resources.

The announcement of the proposed guidelines, called advance notices of proposed rulemaking, coincided with the release by Sen. Howard Metzenbaum, D-Ohio, of a list of 47 companies that bought annuities from Executive Life Insurance Co., Los Angeles. The list included 36 companies that terminated their plans or those of subsidiaries and resulted in a total of about $800 million in surplus assets, Sen. Metzenbaum said.

The companies include Bulova Corp., Cannon Mills, Lone Star Steel, National Can and RJR Nabisco Inc.

Of the companies on the list, the Department of Labor named three under investigation for improper selection of annuity providers — McCrory Stores, Raymark Corp. and Revlon Inc. There may be more.

The latest moves reflect widespread acknowledgment that decisive action is necessary to preempt sustained participant losses resulting from the failure of Executive Life and potential losses resulting from financial instability in the insurance industry.

"Both the administration and the Congress will need to take further action to protect retirees," Sen. Metzenbaum said. "There is no reason that these retirees, who never chose to have their secure pensions transferred to Executive Life or any other insurer, should lose a penny of their retirement monies."

Announcement of the proposals follows on the heels of lawsuits brought by the Labor Department against two companies — Maxxam Inc. and MagneTek Inc. — that purchased annuities from Executive Life. Labor officials also sent letters to several other companies demanding they guarantee annuities purchased from insurers whose financial health they allegedly failed to consider.

"We're putting the greatest possible pressure on the businesses involved and the insurance industry to take constructive action," David George Ball, assistant sec-

See **Annuities** *on page 39*

Kansas board grills Ron Peyton

Callan's assignment may be in jeopardy

By Curtis Vosti

TOPEKA, Kan. — Consulting giant Callan Associates Inc. dodged a bullet at a June 14 board meeting of the Kansas Employees Retirement System, but may have been injured nonetheless.

System trustees, in the midst of sorting out more than $100 million in investment losses that prompted state and FBI investigations, spent most of the meeting grilling Callan President Ronald Peyton over his role as a consultant to the system since 1976. A tight-lipped Mr. Peyton, who read in that morning's paper that at least three of the seven trustees — six newly appointed in the past seven months — wanted to terminate Callan, repeatedly told the board he was not responsible for its investment losses.

Mr. Peyton and Callan survived the meeting with the job intact, for now. Board Chairman Walt

Callan's Ron Peyton survived the Kansas fund's meeting with Callan's job intact.

Cobler said during the meeting that he would like the board to seek new bids for consulting services and discontinue using soft dollar payments to Callan.

The board voted, however, to have Callan do a search for a manager to make a thorough evaluation of its $500 million real estate portfolio.

Callan has billed the system $245,000 — which includes $125,000 for real estate consulting services — so far in the fiscal year ended June 30 for services Mr. Peyton described as performance measurement, asset allocation, manager searches and other "projects" as assigned.

"I thought we had oversight, but all he (Mr. Peyton) said he does is monitor," said Mr. Cobler.

Mr. Peyton's place on the hot seat came as the board struggles to understand how the $4 billion system became embroiled in a scandal in its $300 million direct placement program. While Callan has not been directly implicated in the scandal, board members indicated they expected the consultant's role was to help them avoid faulty investments.

The system has sued one of its former direct placement managers — Reimer & Koger Associates Inc., Shawnee Mission, Kan. — for breaches of contract and fiduciary duty and fraud in connec-

See **Kansas** *on page 38*

California fund fighting back

By Steve Hemmerick

SACRAMENTO, Calif. — Trustees of the $66 billion California Public Employees' Retirement System directed their staff last week to fight Gov. Pete Wilson's efforts to reconfigure the retirement board.

They began mobilizing giant state employee groups and congressmen to battle the governor.

Meanwhile, State Assembly Speaker Willie Brown, who had been linked to legislation to reconfigure the board, came out against the proposal. State Controller Gray Davis and State Treasurer Kathleen Brown, who would lose their ex-officio retirement board seats if the legislation were passed, also attacked it.

U.S. Reps. Robert T. Matsui and Pete Stark, both California Democrats, sent letters to Gov. Wilson warning him that reconfiguration of the board could lead to the retirement system losing its federal tax-exempt status because assets would be used for state programs rather than for beneficiaries.

U.S. Rep. Edward Roybal, D-Calif., chairman of the House Select Committee on Aging, said he has begun a committee "inquiry" into the governor's "precedent-setting and legally questionable proposals" to reconfigure the board.

But Gov. Wilson continued his attack on the retirement system, calling it a "gold-plated" behemoth with "surplus cash."

He said the retirement system should help the state with its budget troubles.

After listening to three hours of employee-group testimony on Wednesday against reconfiguring the board, Jake Petrosino, a retirement board member, said: "I think the governor has been hurt" politically.

Charles Valdes, chairman of the retirement board's investment committee, promised a "state referendum" through California's ballot initiative process before the governor could take over the retirement system.

The action was the latest fusillade in an acrimonious dispute that has included allegations that state leaders were trying to rob the employees' system blind and emasculate its shareholder rights program, just as they have already done to the state teachers' fund.

The proposal would eliminate

See **Fight** *on page 39*

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Avon restructuring 401(k) plan options

By Joel Chernoff

NEW YORK — Avon Products Inc. has replaced two options and added another in its $132 million 401(k) salary reduction plan.

Elio Parroni, director-trust investments, said the changes will enhance the plan's investment options and make Avon's 401(k) more in line with proposals issued by the Department of Labor for participant-directed plans.

Under the Labor Department's proposed 404(c) rule, plans would have to offer at least three diversified investment options, excluding employer stock, to avoid certain fiduciary liability.

Avon officials decided to terminate Fidelity Institutional Retirement Services Co., Boston, which ran $12.5 million in its Retirement Growth Fund and $11.5 million in its Equity Income Fund.

Instead, Avon hired Provident Investment Counsel, Pasadena, Calif., to run a separate account for growth stocks that is "more tailor made to plan participants," Mr. Parroni said. Also, the 401(k) plan is large enough to afford a separate account, he explained.

Avon replaced the equity income fund, which usually contained 20% to 30% in fixed-income and convertible issues, with a Standard & Poor's 500 Stock Index fund managed by State Street Bank & Trust Co., Boston.

That way, participants get broad exposure to the stock market, while fees are kept at a minimum, Mr. Parroni said. Given "the ability of plan participants to determine their asset allocation, we feel (having) a pure equity exposure like the S&P index would be more appropriate."

Avon added the Merrill Lynch Treasury Fund to provide a money-market alternative to the guaranteed investment contract fund. Initial funding will be limited to proceeds from GICs maturing as of July 1.

The 401(k) plan has about $97 million invested in GICs. The fifth investment option is in company stock, which has about $11 million in assets.

Avon's $440 million defined benefit plan hired Trust Co. of the West, Los Angeles, to run a mortgage-backed securities portfolio that initially will be set at $20 million, but is expected to double in the next couple of years.

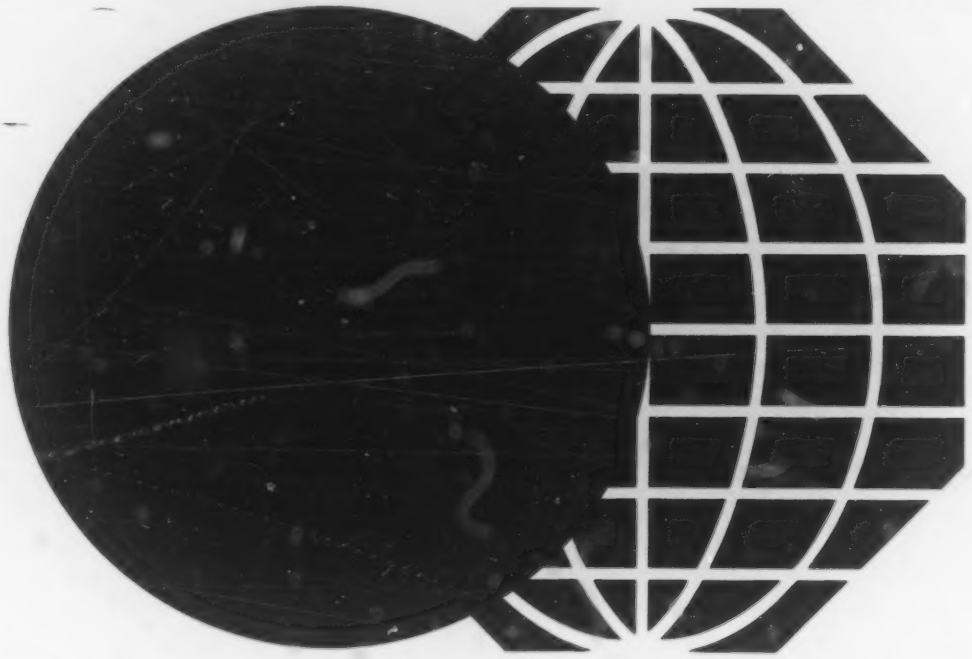
Assets for the mortgage-backed securities portfolio came from the fund's real estate and stock holdings, as part of an annual rebalancing, Mr. Parroni said. Avon previously announced a liquidation of its real estate investments, valued at $46.5 million. It is shifting those assets into fixed income.

Wilshire Associates, Santa Monica, Calif., advised on the mortgage-backed securities manager search and assisted on the defined contribution plan changes. ■

CORRECTIONS & CLARIFICATIONS

- A City Council Audit Committee recommended the Houston Municipal Employees Pension System put out a request for proposals for a general consultant and develop a three-year rotation policy for consultants. The committee did not recommend terminating **SEI Capital Resources**, the fund's consultant, as reported in the June 10 issue.

  SEI intends to respond to the RFP if the pension fund adopts the recommendation.
- **PCM International**'s telephone number was listed incorrectly in the May 20 issue. The number is (201) 912-7500.
- **Security Trust Co.** listed the wrong address in its response for the May 20 issue. The address is 2 N. Charles St., Baltimore, Md. 21201.



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INVESTING

Black gold, bonds unlikely bedfellows in asset derby

■ Oil and bonds were the top performing asset classes in the year ended June 1, a survey shows.

Although the two asset classes typically move in opposite directions, an economic slump propelled the bond market while the Persian Gulf war boosted oil prices, said the annual survey of financial and tangible assets published by Salomon Brothers Inc., New York.

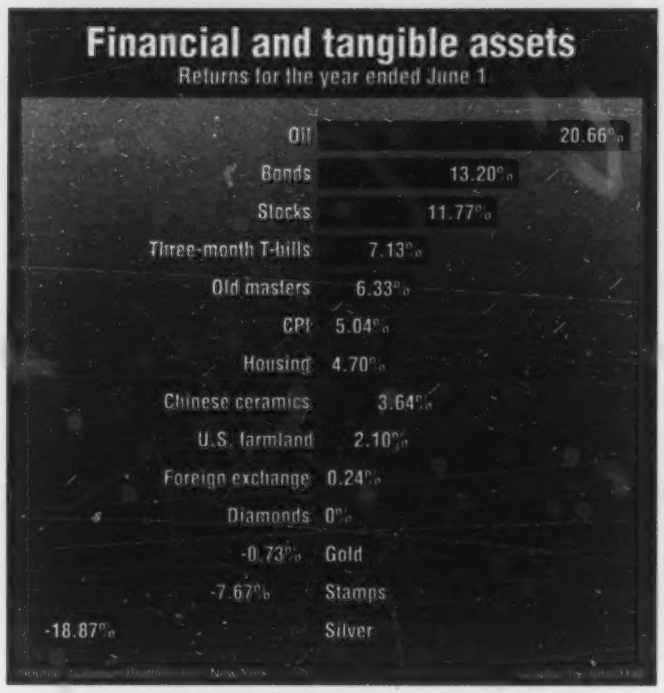
Other tangible asset classes fared poorly during the period, with returns below the inflation rate.

Financial assets reigned. Bonds, stocks and U.S. treasury bills were three of only five assets that had positive returns after adjusting for inflation. Old master paintings rounded out the five.

In another surprise, oil and gold — which typically move in tandem with each other and the inflation rate — had divergent returns during the period, reflecting the war's effect on energy prices and the economic climate in the Soviet Union.

"With their economy collapsing, the Soviets have been emptying their gold coffers to raise hard currency. And while they normally would be selling oil to take advantage of today's prices, exports have dwindled with the deterioration in the domestic oil industry," the report said.

Stocks should shine next year, Salomon predicted, as investors seek alternatives to poor-performing real estate.



The report noted investor confidence in the U.S. dollar has been restored because inflation is low and trending down, the United States achieved its goals in the Persian Gulf and the U.S. political environment is stable.

In addition, U.S. companies are raising equity in volumes not seen in several years. "This shift in corporate financing patterns signals the end of along period of exploding debt levels and eroding financial integrity," the report said.

WASHINGTON

Breeden hints at more oversight

■ Is Securities and Exchange Commission Chairman Richard C. Breeden going to try for greater SEC oversight of defined contribution plans as he has for banks and futures?

In his comments May 24 to the Investment Company Institute's annual meeting, Mr. Breeden observed: "Defined contribution plan participants who make their own investment decisions generally do not have the benefit of the disclosures required under the securities laws."

At a minimum, he added, "plan participants should have sufficient information to make meaningful investment decisions."

Mr. Breeden was referring to the fact that securities laws do not pertain to bank collective investment funds and insurance company separate accounts that are marketed to defined contribution plans. The Investment Company Institute, the trade association representing mutual funds, has been campaigning to bring these funds under SEC regulation.

Mr. Breeden is careful not to tread on the turf of the Department of Labor, which regulates these plans. He explained afterwards the agencies have discussed the issue.

"We don't want to have a gap between what (the 1974 Employee Retirement Income Security Act) and the securities law provides," he said.

But that doesn't necessarily mean defined contribution plans would have to be regulated by the 1940 Investment Company Act, he added.

FINANCING

Samsung unit completes global deal

■ Samsung Electronics Co. Ltd. has completed the sale of $100 million in Global Depository Shares in an international offering to institutional investors in Europe, Asia and the United States.

The international offering consisted of 2,479,972 shares sold primarily to institutional investors in Europe and Asia and 1,335,370 shares sold to U.S. institutional investors under Rule 144A.

The deal follows a December offering by another Samsung subsidiary, Samsung Corp. The issue was $40 million of which $20 million was offered to U.S. investors under Rule 144A.

Both deals were lead managed by The First Boston Corp. and Credit Suisse First Boston Ltd.

The shares were priced at a 27% premium to the underlying Korean shares. This reflects the strong international interest in Korean equities, according to Bryant Seaman, a director in the equity capital markets department of First Boston.

Samsung Electronics, which was the first company to pioneer the international capital markets in 1985 with a European convertible bond offering, is the major operating company of the Samsung Group, one of the largest business conglomerates in Korea, with 1990 sales revenue of $20.1 billion or more than 10% of total Korean GNP.

The government said it will open the Korean market to director foreign ownership in 1992.

REAL ESTATE

Manager seeks apartment hunters

■ The ideal real estate play for institutional investors is to buy existing apartments and refurbish them, principals of Marquette Property Investments, Chicago, believe.

Not surprisingly, Marquette is seeking pension money to do just that in suburban Chicago and Detroit. Plans are to purchase about 5,000 units in 20 deals for about $200 million. One $9.5 million deal is expected to close this month.

Pension funds should invest for four to five years — a full cycle in rental revenue growth — in areas with high employment growth and high household formation growth, said managing partners Bruno Bottarelli and Nick Ryan.

Their theory is rental revenue growth is a function of demand, and Chicago and Detroit are poised to face increased demand. The idea is to buy existing units in areas without a new apartment supply and with decreasing vacancies and increasing demand, they said. The rental market will tighten, and revenue growth will climb. New, higher-cost apartments will be built to meet the demand, and the new housing will drive all rental rates upward.

Messrs. Bottarelli and Ryan say cap rates have stayed steady at about 8% to 8½% for 20 years. The action, they note, is in rental revenue. Rents should increase an average of 7.7% annually for five years in their target markets, after staying flat for the previous five years.

TOM LINDEN

Existing apartment buildings in suburban growth areas are being touted as a good real estate play for pension fund investors.

INTERNATIONAL

U.S. and German debt loses favor with investors

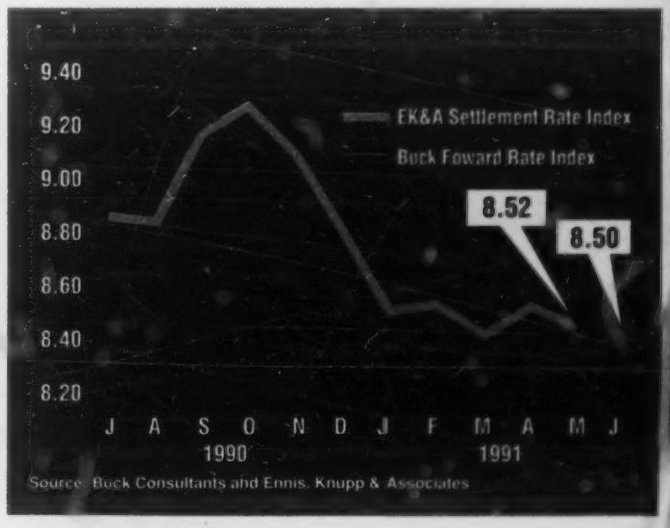
■ French franc, yen and European currency unit bonds became more attractive to European and Middle Eastern institutional investors in 1990, while the U.S. and German bond markets lost favor.

U.S. and German bonds, however, still account for the largest market share among European and Middle Eastern investors, according to a survey by Greenwich Associates, Greenwich, Conn.

During the first quarter of 1991, buyer interest continued in the ECU bond market, and rose in the Canadian dollar, Italian lira and Spanish peseta bond markets, reported David Bullock, a partner of Greenwich Associates. These markets afforded higher yields than the U.S. market's or featured a more stable currency than the dollar, Mr. Bullock explained.

European and Middle Eastern investors' purchases of U.S. dollar-denominated bonds dropped nine percentage points for the year ended Dec. 31 — to 25% of their total international bond purchases. Their purchases of deutsche mark bonds dropped four percentage points to 15%.

Interest rates partly explained the moves. While many European and Middle Eastern investors believed rates were on the upswing in Germany — and thus bad for the bond market — they expected lower rates and yields in the United States. Weakness in the U.S. dollar dampened some enthusiasm for U.S. bond investments.



PEOPLE

GM adds realty portfolio manager

■ General Motors Corp.'s pension fund has added Joseph D. Stecher as portfolio manager-real estate in its private market investments group.

Mr. Stecher was previously assistant vice president in the U.S. real estate group at Banque Indosuez, New York, with responsibilities in the acquisition and asset management areas.

Though his position is a new one, the addition of a portfolio manager does not indicate a major shift in real estate investing for the $36.3 billion pension fund, he said.

Money managers' foreign assets grow 22%

By Trudy Ring

International and global investments by U.S. tax-exempt institutions continued rising in the year ended March 31, with a 21.8% increase in assets run by international/global managers surveyed by *Pensions & Investments*.

The growth rate was less than the 38% posted in the previous 12-month period, but ahead of the growth that would have resulted from market appreciation alone. On a market-adjusted basis, the growth rate was 14.7%.

The growth slowed as investors digested foreign allocations made in the previous year. The slowdown also could reflect the fact that most larger investors already have invested overseas, so most of the new money is coming from small and midsize tax-exempt funds.

The total universe of managers ran $111.7 billion in international and global assets for U.S., tax-exempt institutional investors, up from $91.7 billion a year earlier. Managers are ranked by assets over which they have full discretion and which they themselves run.

Managers of managers and currency overlay managers are ranked separately.

The top 50 managers in the universe ran $99.2 billion as of March 31, a 19.2% increase from the $83.2 billion they had a year earlier. The $83.2 billion represented a 38% increase from 1989.

Accounts with international mandates were more popular than those with a global focus, reversing a two-year trend. The top 50 managers of international accounts ran $77 billion as of March 31, up 24.2% from a year earlier. This outstripped market appreciation: International equities, as measured by the Morgan Stanley Capital International Europe Australia Far East Index, rose just 2.9% in the year ended March 31; non-U.S. bonds, as measured by the J.P. Morgan Government Bond Index, rose 18.2%. About 84% of assets in the universe of international managers were in equities.

The top 50 managers of global accounts posted just a 6.3% increase, to $26.9 billion. Global equities, as measured by the Morgan Stanley Capital International World Index, appreciated 7% in the 12 months ended March 31. Global bonds, as measured by the Salomon World Bond Index, rose 10.6%. Among accounts with global mandates, about 57% of the assets were in equities.

Last year, international increased 29.6% and global, 60.4%.

Some managers and consultants said they have seen a bit of resistance to global investing by fund sponsors.

Toby Westbrook, senior vice president of San Francisco-based Callan Associates Inc., said his firm hasn't done a lot of global searches, although it is a proponent of global investing. Some sponsors prefer to deal with U.S. and international securities separately, he said.

At any rate, consultants said their clients still are keenly interested in international and global investing.

"All the surveys that I've seen indicate that plan sponsors plan to increase their commitments," said Bobbie Parkhill, principal of Ennis, Knupp & Associates, Chicago.

State Street Bank & Trust Co., Boston, ranked first among international/global managers for the fifth consecutive year. Its $9.4 billion in international and global assets combined represented a 20% increase from its year-ago figure. With only $40 million in global mandates, the bank is the largest international manager.

Despite State Street Bank's status as one of the biggest index fund managers, the biggest area of growth was in active equity strategies, said Peter Braun, vice president and director of marketing. More investors are attracted to highly structured, active investment processes, like those that the bank offers, he said.

"Our active strategy tends to be very much a core, well-diversified process," he added, so it's appealing to first-time international investors.

In passive strategies, Mr. Braun said, investors are tending to move away from tracking the capitalization-weighted EAFE index, instead selecting their own specialized weightings.

In the universe of international and global managers combined, about 84% of assets were in active strategies.

Ranked second for the second consecutive year was Brinson Partners Inc., Chicago. Its $8.1 billion in international and global accounts represented a 19% increase from a year ago.

"There continues to be the evolution of thinking on the part of both plan sponsors and consultants . . . that the true playing field is a global playing field," said Gary Brinson, president and chief investment officer.

Brinson Partners' accounts include $5.1 billion with global mandates — making it the largest global manager — and $3 billion with international mandates. Mr. Brinson noted investors tend to view fixed income globally, while seeing the equity markets as divided into U.S. and international components.

By the mid-1990s, he predicted, there will be a more global focus overall.

Rounding out the top 10 managers, Capital Guardian Trust Co., Los Angeles, and Baring International Investment, London, ranked in the third and fourth spots respectively, just as they had last year. Rowe Price-Fleming International Inc., Baltimore, moved up to fifth from seventh, and Schroder Capital Management International, New York, rose to sixth from eighth. J.P. Morgan Investment Management Inc., New York, dropped a notch, to seventh from sixth, and Wells Fargo Nikko Investment Advisors, San Francisco, slipped to eighth from fifth.

Grantham, Mayo, Van Otterloo & Co., Boston, moved up to ninth from 12th, and Nomura Capital Management Inc., New York, moved up to 10th from 15th. Batterymarch Financial Management, Boston, which had been 10th last year, dropped to 12th, and Morgan Stanley Asset Management, which had been ninth, fell to 25th (the asset figure reported in 1990 had been overstated).

A firm with major growth in the past year was PanAgora Asset Management, Boston, whose combined international and global assets rose nearly sixfold, to $2.8 billion from $490 million. It was 11th in the rankings, moving up from 39th.

Much of the growth came from short-term global fixed income, said Kim Kenly, general manager. "Pension funds are looking for ways to enrich their short-term securities allocation," he said. The global strategy has a higher yield than U.S. money market instruments and also provides a way for funds to get their feet wet in global investing, he said. "It seems to hit upon a lot of buttons."

In equities, clients have been attracted to the firm's country allocation strategy, which actively manages the exposure to each of the EAFE markets while indexing stocks within the markets, Mr. Kenly said.

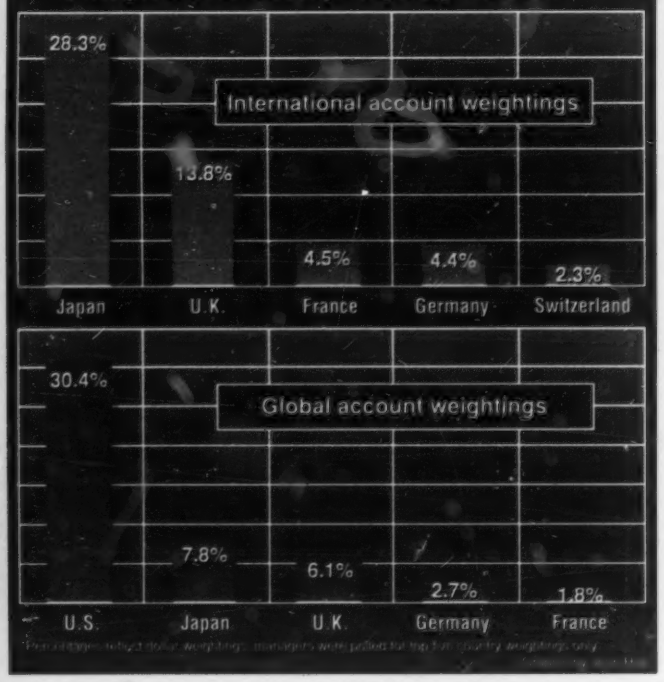
There were slight shifts in equity managers' country weightings in the past year. Among international accounts, Japan again had the heaviest weighting, 28.3%, up from 25.2% last year. The weightings are based on a composite of all accounts. The United Kingdom had the next highest, 13.8%, up from 11.5% a year ago.

France and Germany exchanged positions, with France edging into third place at 4.5% and Germany at 4.4%. Last year, Germany had a 10.9% weighting, and France had 7%. Switzerland was again fifth, with 2.3%, compared with 2.7% last year.

Among global accounts, the U.S. again had the highest weighting, 30.4%, slightly down from the 32.2% it had last year. Japan again came in second, although its weighting was down to 7.8% from 14.9%. The next three positions went to the same countries as last year, although each had its total weighting decrease: the United Kingdom, to 6.1% from 8.5%; Germany, to 2.7% from 7.6%; and France, to 1.8% from 4.1%.

Data for this story and the profiles and tables that follow came from responses to *P&I* questionnaires sent to all international and global money managers. To be profiled, a manager had to be ranked in *P&I*'s top 50 for global and/or international assets under management. All contents ©1991 Crain Communications Inc. Reproduction without permission is prohibited. ■

Japan, U.S. top equity draws*



Overseas managers

	U.S. $ millions		U.S. $ millions
2. Brinson Partners	8,121	65. Lombard Odier Int'l	343
4. Baring Int'l	4,351	67. Massachusetts Financial	313
6. Schroder Capital	3,845	69. Invesco MIM Int'l	290
8. Wells Fargo Nikko	3,419	71. Yamaichi Int'l	275
10. Nomura Capital	2,884	73. AMI Partners	258
12. Batterymarch Financial	2,744	75. Posthorn Global	247
14. World Invest	2,533	77. Burgess Capital	239
16. Morgan Grenfell	2,329	79. Franklin Resources *	200
18. Bankers Trust	2,135	81. Ivory & Sime Int'l	181
20. Global Fixed Income	1,807	83. Schroder Ventures	143
22. Globe Finlay	1,432	85. Prudential Asia	135
24. Fiduciary Trust	1,384	87. Security Capital	128
26. Acadian Asset	1,370	89. Sit/Kim Int'l	88
28. Payden & Rygel	1,200	91. Matuschka Group	86
30. Capital Research	1,033	93. Interinvest	78
32. Alliance Capital	915	95. Babson-Stewart Ivory	71
34. Putnam Cos.	876	97. AIG Global Investors	67
36. Scudder Stevens & Clark	814	99. GIM Global Advisors	60
38. Wellington Mgmt.	752	101. Wright Investors'	54
40. Julius Baer	706	103. Henderson Int'l	51
42. County NatWest	697	105. Foreign & Colonial	35
44. Aetna Capital	591	107. Harris Investment *	26
46. Daiwa Int'l	553	109. Baillie Gifford	24
48. Boston Overseas	541	111. Bessemer Trust	22
50. Travelers	513	113. Strategic Investment Partners	20
52. Arnhold & S. Bleichroeder	475	115. Johnson Capital	13
54. ANB Investment	440	117. Credit Suisse Asset	11
56. N.M. Rothschild	417	119. Gulfstream Global	8
58. Dunedin Fund	402	121. UBS Phillips & Drew	7
60. Citibank Investment	365	123. Millburn Corp.	2
62. Marvin & Palmer	350	125. Lang Asset	***

U.S. institutional, discretionary, tax-exempt assets
* as of Dec. 31
** P&I estimate
*** Less than $1 million

Acadian Asset Management

260 Franklin St., Boston, Mass. 02110; (617) 439-6141

Total assets managed	$1,450,000,000
Non-U.S. pension assets	$80,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$1,370,000,000
International	$1,340,000,000
Active equity accounts	$1,125,000,000
Other	$215,000,000
Global	$30,000,000
Active equity accounts	$30,000,000
U.S. tax-exempt clients	32
Minimum separate account	$25,000,000

Acadian Asset Management Inc.'s international equity assets were committed most heavily to Japan, Germany, Singapore, the United Kingdom and Hong Kong. Its global equity assets were committed most heavily to Japan, the United States, Canada, the United Kingdom and Denmark.

The firm uses a structured, disciplined, active multifactor approach. It systematically exploits characteristics such as low p/e and low p/b ratios and other pricing anomalies, at both the country and individual stock level.

Gary L. Bergstrom is chief investment officer; Churchill G. Franklin is client contact.

Aetna Capital Management International Ltd.

151 Farmington Ave., YCC1, Hartford, Conn. 06156; (203) 275-3711

Total assets managed	$690,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$591,000,000
International	$591,000,000
Active equity accounts	$232,000,000
Indexed equity accounts	$359,000,000
U.S. tax-exempt clients	177

Aetna Capital Management International Ltd.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and Switzerland.

Risk management and maximization of total return are achieved through broad diversification into efficient and liquid markets and stocks. Economic and fundamental value analysis is used for country, sector and stock selection.

Richard W. Overton is chief investment officer; Thomas V. Scanlon is client contact.

Alliance Capital Management L.P.

1345 Avenue of the Americas, New York, N.Y. 10105; (212) 969-1168

Total assets managed	$50,077,000,000
Non-U.S. pension assets	$3,308,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$27,172,000,000
International	$857,900,000
Active equity accounts	$519,000,000
Indexed equity accounts	$281,000,000
Active bond accounts	$57,000,000
Global	$58,000,000
Active equity accounts	$9,000,000
Indexed equity accounts	$49,000,000
U.S. tax-exempt clients	281
Minimum separate account	$10,000,000

Alliance Capital Management L.P.'s international equity assets were committed most heavily to Japan, the United Kingdom, the Netherlands, Canada and Switzerland. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Germany and the Netherlands.

The firm is a research-driven, bottom-up fundamental growth stock investor. Value is added from security selection decisions. It does not ignore country/currency decisions and has developed quantitative models that assist in identifying attractive and unattractive markets and currencies.

The firm runs $200 million of discretionary tax-exempt assets in currency hedging programs; all of the underlying assets are managed internally.

Elizabeth M. Smith is client contact.

ANB Investment Management Co.

1 N. LaSalle St., Suite 600, Chicago, Ill. 60690; (312) 661-5586

Total assets managed	$16,122,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$15,047,000,000
International	$440,000,000
Indexed equity accounts	$440,000,000
U.S. tax-exempt clients	691

ANB Investment Management Co.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and Switzerland.

The firm offers a passive commingled fund designed to replicate the risk/reward characteristics of the EAFE index.

John R. Tilton is chief investment officer; Ken Sobolewski is client contact.

Arnhold and S. Bleichroeder

45 Broadway, New York, N.Y. 10006; (212) 943-9200

Total assets managed	$1,325,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$615,000,000
International	$475,000,000
Active equity accounts	$475,000,000
U.S. tax-exempt clients	14
Minimum separate account	$20,000,000

Arnhold and S. Bleichroeder Inc.'s international equity assets were committed most heavily to the United Kingdom, Switzerland, Mexico, Spain and France.

The firm manages highly concentrated portfolios (30 stocks) in international equities. It seeks fundamental value by comparing absolute and relative price/earnings and price/cash flow.

Howard B. Moss is chief investment officer; Frederic C. Reynolds is client contact.

Axe-Core Investors Inc.

400 Benedict Ave., Tarrytown, N.Y. 10591; (914) 333-5222

Total assets managed	$1,008,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$961,000,000
International	$343,000,000
Indexed equity accounts	$343,000,000
U.S. tax-exempt clients	7
Minimum separate account	$10,000,000

Axe-Core Investors Inc.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and Australia.

The firm offers a condensed portfolio constructed of the more liquid issues with a low sale re-balancing date. Custodial costs and settlement challenges are sidestepped by converting ordinary shares into DTC-eligible ADRs.

Robert A. Windsor is chief investment officer; Seth Lynn is client contact.

Julius Baer Investment Management

330 Madison Ave., New York, N.Y. 10017; (212) 297-3850

Total assets managed	$811,000,000
Non-U.S. pension assets	$79,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$706,000,000
International	$691,000,000
Active equity accounts	$15,000,000
Active bond accounts	$668,000,000
Balanced	$5,000,000
Global	$15,000,000
Active bond accounts	$15,000,000
U.S. tax-exempt clients	19
Minimum separate account	$10,000,000

Julius Baer Investment Management's investment policy is characterized by active country and currency allocation as well as active maturity management. Allocation decision are based on fundamental economic research, concentrating on top-quality issuers in strong, stable countries. Its portfolios primarily are composed of government and government-agency issues, with an AA minimum requirement for corporate issues.

Jonathan C. Minter is chief investment officer; Jay A. Dimberger is client contact.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10015; (212) 454-2215

Total assets managed	$105,958,000,000
Non-U.S. pension assets	$5,368,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$100,247,000,000
International	$2,135,000,000
Active equity accounts	$535,000,000
Indexed equity accounts	$1,468,000,000
Active bond accounts	$19,000,000
Indexed bond accounts	$113,000,000
U.S. tax-exempt clients	207
Minimum separate account	$15,000,000

Bankers Trust's international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Switzerland and Malaysia.

The firm uses a top-down and sector-driven approach, incorporating both fundamental and quantitative disciplines. Regional specialist portfolio teams interpret key investment themes in the context of each market's characteristics.

The firm runs $600 million of discretionary tax-exempt assets in Smart Hedge and Currency Premium strategies; none of the underlying assets is managed internally.

H. Kent Atkins is chief investment officer; Laurie J. Oat is client contact.

Barclays de Zoete Wedd Investment Management

Seal House, 1 Swan Lane, London EC4R 3UD, U.K.; 071-623-7777

Total assets managed	$45,000,000,000
Non-U.S. pension assets	$44,865,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$135,000,000
Global	$135,000,000
Balanced	$135,000,000
U.S. tax-exempt clients	1
Minimum separate account	$25,000,000

Barclays de Zoete Wedd Investment Management Ltd.'s global equity assets were committed most heavily to the United States, Japan, Germany, Belgium and Switzerland.

The firm establishes an appropriate benchmark for each client to reflect its risk/return tolerance. This then determines the optimum asset allocation and stock selection process, generally with an index tracking, core/satellite or active approach.

Donald Brydon is chief investment officer; Jane Platt is client contact.

Opportunities in post-1992 Europe will be discussed Oct. 28.

We're changing the way

Baring International Investment

155 Bishopsgate, London EC2M 3XY, U.K.; 071-628-6000

Total assets managed	$4,947,000,000
Non-U.S. pension assets	$596,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$4,351,000,000
International	$4,334,000,000
Active equity accounts	$2,655,000,000
Active bond accounts	$1,679,000,000
Global	$17,000,000
Active equity accounts	$17,000,000
U.S. tax-exempt clients	45
Minimum separate account	$25,000,000

Baring International Investment's international equity assets were committed most heavily to Japan, Hong Kong, Switzerland, the United Kingdom and Singapore/Malaysia.

Its global equity assets were committed most heavily to Japan, the United Kingdom, France, the United States and Canada.

The firm's equity approach seeks growth potential given earnings strength, valuation levels and liquidity. EAFE, regional and country-specific mandates are offered. The fixed-income approach focuses on country/currency decisions and uses high-quality government issues. Forwards are actively used for hedging and cross hedging. Global, non-dollar and fully-hedged mandates are available.

Peter S. Hartley is chief investment officer; Michael F. Palone is client contact.

Batterymarch Financial Management

600 Atlantic Ave., Boston, Mass. 02210; (617) 973-9300

Total assets managed	$6,365,000,000
Non-U.S. pension assets	$1,305,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$4,545,000,000
International	$1,680,000,000
Active equity accounts	$1,680,000,000
Global	$1,094,000,000
Active equity accounts	$1,094,000,000
U.S. tax-exempt clients	23
Minimum separate account	$10,000,000

Batterymarch Financial Management's international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and Canada. The firm's global equity assets were committed most heavily to the United States, Japan, the United Kingdom, France and Germany.

The firm is a value-oriented, conservative adviser with a global perspective. It develops strategies to identify stocks that are underpriced. These strategies are then implemented using systematic, quantitative techniques.

Dean LeBaron is chief investment officer; James C. Pannell is client contact.

BEA Associates

153 E. 53rd St., New York, N.Y. 10022; (212) 832-2626

Total assets managed	$10,187,000,000
Non-U.S. pension assets	$280,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$8,648,000,000
International	$182,000,000
Active equity accounts	$182,000,000
U.S. tax-exempt clients	147
Minimum separate account	$5,000,000

BEA Associates' international equity assets were committed most heavily to Japan, Mexico, the United Kingdom, Malaysia and Germany.

The firm's investment philosophy generally focuses on identification of investment opportunities created by market inefficiencies.

The firm runs $131 million of discretionary tax-exempt assets in currency hedging; none of the underlying assets is managed internally.

William W. Priest is chief investment officer; Timothy Taussig is client contact.

Boston International Advisors Inc.

75 State St., Boston, Mass. 02109; (617) 345-9550

Total assets managed	$1,390,000,000
Non-U.S. pension assets	$23,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$1,097,000,000
International	$1,042,000,000
Active equity accounts	$604,000,000
Indexed equity accounts	$438,000,000
Global	$55,000,000
Active equity accounts	$55,000,000
U.S. tax-exempt clients	19
Minimum separate account	$25,000,000

Boston International Advisors Inc.'s international equity assets were committed most heavily to Japan, France, Italy, Spain and Australia. Its global equity assets were committed most heavily to Japan, the United States, France, the United Kingdom and Australia.

The firm provides exclusively quantitative international management. Value-driven quantitative techniques are used to allocate among the world markets and to select stocks within those markets. The firm also provides strategic currency hedging and customized index funds, such as GDP-weighted, regional and South Africa-free.

The firm runs $409 million of discretionary tax-exempt assets in currency hedging programs; all of the underlying assets are managed internally.

Lyle H. Davis is chief investment officer; Jennifer Dunning is client contact.

Boston Overseas Investors

125 Summer St., Boston, Mass. 02110; (617) 951-0004

Total assets managed	$745,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$541,000,000
International	$541,000,000
Active equity accounts	$541,000,000
U.S. tax-exempt clients	6
Minimum separate account	$40,000,000

The international equity assets of Boston Overseas Investors Inc., previously Marsh & Cunningham-Castergren International, were committed most heavily to the United Kingdom, France, Spain, Japan and Mexico.

The firm uses a top-down theme and country allocation discipline, followed by bottom-up stock selection.

The firm runs $958 million of discretionary tax-exempt assets in forward currency contracts of which $541 million are managed internally.

Hakan Castegren is chief investment officer; Edward E. Wendell Jr. is client contact.

Brandes Investment Management Inc.

12760 High Bluff Drive, Suite 160, San Diego, Calif. 92130; (619) 755-0239

Total assets managed	$150,000,000
Non-U.S. pension assets	$2,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$76,000,000
International	$15,000,000
Active equity	$15,000,000
Global	$61,000,000
Active equity accounts	$61,000,000
U.S. tax-exempt clients	100
Minimum separate account	$100,000

Brandes Investment Management Inc.'s international equity assets were committed most heavily to Mexico, the United Kingdom, the Netherlands, Hong Kong and Germany.

Its global equity assets were committed most heavily to the United States, Mexico, the Netherlands, the United Kingdom and Germany.

The firm applies strict Graham & Dodd analysis to identify undervalued securities worldwide. The approach is based solely on a bottom-up fundamental evaluation of individual companies.

Charles Brandes is chief investment officer; Barry O'Neil is client contact.

Brinson Partners Inc.

3 First National Plaza, Chicago, Ill. 60602; (312) 220-7100

Total assets managed	$16,486,000,000
Non-U.S. pension assets	$286,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$15,713,000,000
International	$3,045,000,000
Active equity accounts	$1,489,000,000
Active bond accounts	$1,556,000,000
Global	$5,076,000,000
Active equity accounts	$354,000,000
Active bond accounts	$306,000,000
Balanced	$3,916,000,000
U.S. tax-exempt clients	316
Minimum separate account	$10,000,000

Brinson Partners Inc.'s international equity assets were committed most heavily to the United Kingdom, Japan, Germany, Canada and France. Its global equity assets were committed most heavily to the United States, the United Kingdom, Japan, Germany and Canada.

The firm's emphasis is on global fundamental, economic value-based cash flow analysis. The process is disciplined and top-down. Broad diversification is sought both within and across countries. Risk control is emphasized.

Gary P. Brinson is chief investment officer; Edward C. Hamill is client contact.

Brown Brothers Harriman

59 Wall St., New York, N.Y. 10005; (212) 483-1818

Total assets managed	$14,465,000,000
Non-U.S. pension assets	$75,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$5,394,000,000
International	$394,000,000
Active equity accounts	$387,000,000
Active bond accounts	$7,000,000
Global	$103,000,000
Active equity accounts	$75,000,000
Active bond accounts	$28,000,000
U.S. tax-exempt clients	314
Minimum separate account	$10,000,000

Brown Brothers Harriman & Co.'s international equity assets were committed most heavily to Japan, the United Kingdom, France and Hong Kong. Global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Germany and France.

The firm manages equities by identifying companies, industries and markets with strong or improving revenue and earnings growth prospects. Fundamental analysis by country specialists in New York, London and Tokyo is emphasized.

Elbridge T. Gerry Jr. is chief investment officer; Paul A. Legvold is client contact.

The master trust and global custody directory will run Oct. 14.

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Burgess Capital Corp.

499 Seaport Court, Suite 201, Redwood City, Calif. 94063; (415) 369-4545

Total assets managed	$315,000,000
Non-U.S. pension assets	$72,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$239,000,000
International	$70,000,000
Active equity accounts	$70,000,000
Global	$169,000,000
Active equity accounts	$166,000,000
Balanced	$3,000,000
U.S. tax-exempt clients	16
Minimum separate account	$5,000,000

Burgess Capital Corp.'s international equity assets were committed most heavily to Australia, Malaysia, Singapore, Thailand and Spain. Its global equity assets were committed most heavily to Singapore, Malaysia, Australia, Spain and Thailand.

The firm emphasizes capital preservation and consistent long-term growth. The firm is risk-averse and uses a fundamental, top-down/bottom-up approach to invest in large- to medium-capitalization, high-quality, financially sound companies. The decision-making process is team-based.

Robert F. Burgess is chief investment officer and client contact.

Capital Guardian Trust Co.

333 S. Hope St., Los Angeles, Calif. 90071; (213) 486-9200

Total assets managed	$23,531,000,000
Non-U.S. pension assets	$392,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$22,557,000,000
International	$4,413,000,000
Active equity accounts	$4,287,000,000
Active bond accounts	$102,000,000
Balanced	$24,000,000
Global	$922,000,000
Active equity accounts	$679,000,000
Active bond accounts	$36,000,000
Balanced	$207,000,000
U.S. tax-exempt clients	157
Minimum separate account	$10,000,000

Capital Guardian Trust Co.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Australia and France. Global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Germany and Sweden.

The firm uses a fundamental, value-oriented approach based on thorough research supported by direct management contacts. An additional focus is provided by analysts with country, economic, political and social overview responsibilities.

Richard C. Barker is chief investment officer; John H. Seiter is client contact.

Capital Research and Management Co.

333 S. Hope St., Los Angeles, Calif. 90071; (213) 486-9200

Total assets managed	$41,400,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$13,900,000,000
International	$489,000,000
Active equity accounts	$389,000,000
Active bond accounts	$4,000,000
Cash	$96,000,000
Global	$544,000,000
Active equity accounts	$439,000,000
Active bond accounts	$13,000,000
Cash	$92,000,000
Minimum separate account	$250,000

Capital Research and Management Co.'s international equity assets were committed most heavily to the United Kingdom, Japan, Germany, France and Australia. Its global equity assets were committed most heavily to the United States, the United Kingdom, Germany, Australia and Japan.

The firm's investment approach is fundamental, guided by thorough, detailed internal research and analysis based on extensive field work and direct company contact. The goal is to identify the difference between the underlying value of a company and the market price of its securities. Return on investment must be superior to alternatives.

R. Michael Shanahan is chief investment officer; Victor S. Sidhu is client contact.

Chase Investors Management Corp.

1211 Avenue of the Americas, 38th Floor, New York, N.Y. 10036; (212) 730-7300

Total assets managed	$27,609,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$18,925,000,000
International	$1,331,000,000
Indexed equity accounts	$1,150,000,000
Active bond accounts	$6,000,000
Cash	$175,000,000
Global	$7,000,000
Active bond accounts	$7,000,000
U.S. tax-exempt clients	225
Minimum separate account	$50,000,000

Chase Investors Management Corp.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and Switzerland.

A computer-based model guides development of portfolios to track the EAFE Index within client-designated ranges. A top-down approach assesses expected changes in bond and currency markets for international fixed-income portfolios.

The firm runs $579 million of discretionary tax-exempt assets in currency hedging; all of the underlying assets are managed internally.

Michael L. Schonberg is chief investment officer; Kinne S. Yon is client contact.

Citibank Investment Management

641 Lexington Ave., 4th Floor, New York, N.Y. 10043; (212) 559-9004

Total assets managed	$31,200,000,000
Non-U.S. pension assets	$1,041,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$365,000,000
International	$343,000,000
Active equity accounts	$315,000,000
Active bond accounts	$28,000,000
Global	$22,000,000
Active equity accounts	$18,000,000
Other	$4,000,000
U.S. tax-exempt clients	7
Minimum separate account	$10,000,000

Citibank Investment Management's international equity assets were committed most heavily to the United Kingdom, Japan, France, Australia and Germany. Its global equity assets were committed most heavily to the United States, the United Kingdom, Japan, Canada and Australia.

The firm has an active, top-down equity approach with a growth bias. Stock selections are screened, cash holdings are minimal and currency overlay is used. Its fixed-income strategy is active, with centralized country allocation and an emphasis on currency and duration management.

The firm runs $194 million of discretionary tax-exempt assets in currency overlay and hedging programs; all of the underlying assets are managed internally.

Philip Sherman is acting chief investment officer; Carolyn A. Peoples is client contact.

The Common Fund

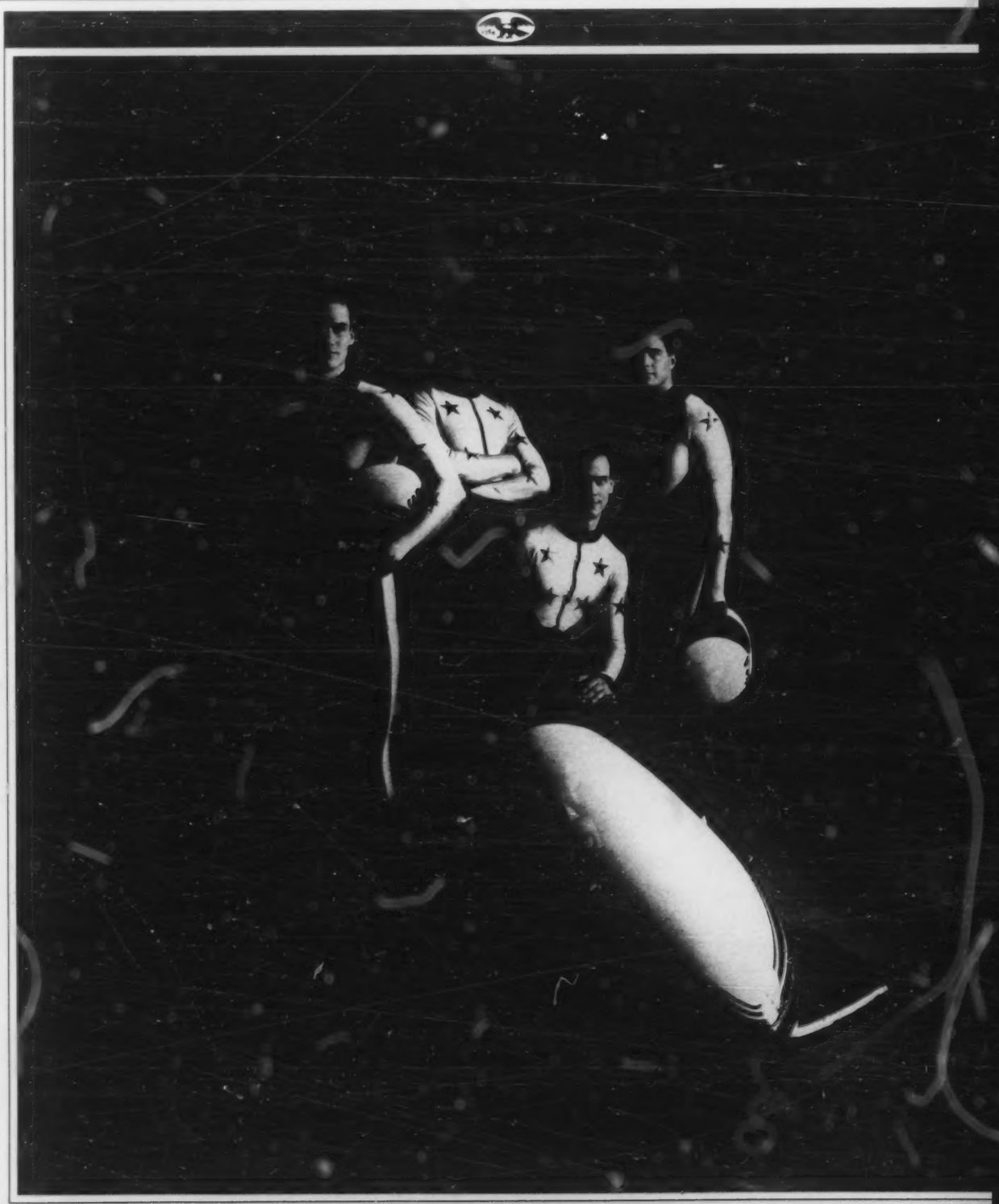
363 Reef Road, Fairfield, Conn. 06430; (203) 255-7000

Tax-exempt assets assigned to others:

Top 50 global account managers

	U.S. $ millions
Templeton Int'l	2,314
Global Fixed Income	1,661
TCW Global	1,430
Batterymarch Financial	1,094
Payden & Rygel	900
Pacific Investment	726
Capital Research	544
Fiduciary Trust	382
Globe Finlay	352
Lexington Mgmt.	256
Rogge Global	231
Morgan Grenfell	207
Franklin Resources *	200
Invesco MIM Int'l	172
Nikko Capital (U.S.A.)	169
Smith Barney Global	156
Philippe Investment	149
Barclays de Zoete Wedd	135
RCM Capital	120
Brown Brothers Harriman *	103
Lombard Odier	71
Interinvest	63
Van Eck Associates	60
Marathon-London	58
MacKay-Shields	52

U.S., institutional, discretionary, tax-exempt assets
* as of Dec. 31



International $1,098,000,000
Global $663,000,000

The Common Fund is a manager of managers.

The Fund for Global Bond Investments is a diversified portfolio with U.S. and foreign government bonds separately managed by five external managers. While currency management is an important factor, the principal opportunity lies in giving the managers the choice of all major world bond markets to offer the best returns.

Its International Equity Fund invests in 70% of the world's markets, allowing clients the opportunity to enhance portfolio return and diversification.

George F. Keane is chief investment officer; David K. Storrs is client contact.

County NatWest Investment Management Ltd.

Fenchurch Exchange, 43/44 Crutched Friars, London, EC3N 2NX, U.K.; 071-374-3000

Total assets managed $18,934,000,000
Non-U.S. pension assets $15,216,000,000
U.S. discretionary tax-exempt assets managed:
Total $697,000,000
International $603,000,000
Active equity accounts $30,000,000
Active bond accounts $23,000,000
Other $550,000,000
Global $94,000,000
Other $94,000,000
U.S. tax-exempt clients 5
Minimum separate account $15,000,000

County NatWest Investment Management Ltd. emphasizes active market allocation implemented through passive stock selection, using its own market representative funds. Quantitative techniques are used throughout the process to monitor and control risk.

The firm runs $980 million of discretionary tax-exempt assets in dynamic currency overlay strategies; the underlying assets aren't managed internally.

Roger Bartley is chief investment officer; Clark Hallmann is client contact.

Daiwa International Capital Management Corp.

200 Liberty St., 26th Floor, New York, N.Y. 10281; (212) 341-5402

Total assets managed $17,773,000,000
Non-U.S. pension assets $2,386,000,000
U.S. discretionary tax-exempt assets managed:
Total $553,000,000
International $553,000,000
Active equity accounts $540,000,000
Indexed equity accounts $13,000,000
U.S. tax-exempt clients 11
Minimum separate account $10,000,000

Daiwa International Capital Management Corp.'s international equity assets were committed most heavily to Japan, Malaysia, Hong Kong, Singapore and Australia.

The firm is a research-oriented active and quantitative manager, seeking incremental returns from the Pacific Basin region. It employs a top-down/bottom-up approach and relies on disciplined guidelines for buy/sell decisions.

Nobumasa Wakabayashi is chief investment officer; Jay S. Mancus is client contact.

Dimensional Fund Advisors

1299 Ocean Ave., 11th Floor, Santa Monica, Calif. 90401; (213) 395-8005

Total assets managed $5,708,000,000
U.S. discretionary tax-exempt assets managed:
Total $5,451,000,000
International $753,000,000
Indexed equity accounts ... $753,000,000
Global $12,000,000
Active bond accounts $12,000,000

Dimensional Fund Advisors Inc.'s international equity assets were committed most heavily to Japan, the United Kingdom, France, Germany and Italy.

The firm offers access to small-company investing in the four major international markets.

Rex A. Sinquefield is chief investment officer; David G. Booth is client contact.

Discount Corp. of New York Advisers

58 Pine St., New York, N.Y. 10005; (212) 248-8989

Total assets managed $4,067,000,000
U.S. discretionary tax-exempt assets managed:
Total $4,067,000,000
Global $148,000,000
Active bond accounts $148,000,000
U.S. tax-exempt clients 13
Minimum separate account $25,000,000

Discount Corp. of New York Advisers' global fixed-income approach uses the highest quality and most liquid U.S. and foreign securities, derivative instruments and key currencies. Duration adjustments, international allocations and and issue selections reflect ongoing fundamental and technical analysis of U.S. and foreign interest rate and exchange market trends/developments.

Patricia Klink is chief investment officer; Adrian M. Massie Jr. is client contact.

Dunedin Fund Managers Ltd.

Dunedin House, 25 Ravelston Terrace, Edinburgh EH4 3EX, Scotland, U.K.; 031-315-2500

Total assets managed $4,856,000,000
Non-U.S. pension assets $1,365,000,000
U.S. discretionary tax-exempt assets managed:
Total $402,000,000
International $337,000,000
Active equity accounts $292,000,000
Active bond accounts $45,000,000
Global $65,000,000
Active equity accounts $65,000,000
U.S. tax-exempt clients 6
Minimum separate account $10,000,000

Dunedin Fund Managers Ltd.'s international equity assets were committed most heavily to Japan, the United Kingdom, France, Germany and Hong Kong.

Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, France and Germany.

The firm's equity approach includes country/currency and stock selection decisions. Stock selection uses a systematic screening system, emphasizing value and momentum criteria. The approach stresses a long-term, low-turnover philosophy.

Alan S. Kemp is chief investment officer; Douglas B. Waggoner, (514) 499-9348, is client contact.

Fidelity Management Trust

82 Devonshire St., Boston, Mass. 02109; (617) 570-6161

Total assets managed $9,997,000,000
Non-U.S. pension assets $764,000,000
U.S. discretionary tax-exempt assets managed:
Total $8,560,000,000
International $704,000,000
Active equity accounts $704,000,000
U.S. tax-exempt clients 74
Minimum separate account $25,000,000

Fidelity Management Trust Co.'s international equity assets were committed most heavily to Japan, the United Kingdom, France, Germany and the Netherlands.

The firm combines active bottom-up stock selection with risk-controlled portfolio management.

Alexander Webb III is chief investment officer; Eugene M. Waldron is client contact.

Fiduciary Trust Co. International

2 World Trade Center, New York, N.Y. 10048; (212) 466-4100

Total assets managed $10,860,000,000
Non-U.S. pension assets $357,000,000
U.S. discretionary tax-exempt assets managed:
Total $5,448,000,000
International $1,002,000,000
Active equity accounts $92,000,000
Active bond accounts $910,000,000
Global $382,000,000
Active bond accounts $382,000,000
U.S. tax-exempt clients 194
Minimum separate account $10,000,000

Fiduciary Trust Co. International's international equity assets were committed most heavily to Japan, Singapore/Malaysia, the United Kingdom, France and Switzerland.

The firm uses a disciplined management style, concentrating on analyzing worldwide markets to build portfolios with the greatest potential for return within acceptable risk tolerance levels. Equity, bond and balanced accounts may be global or international, with currency management an integral part of its investment.

Jeremy H. Biggs is chief investment officer; Catherine K. Janson is client contact.

Fischer Francis Trees & Watts Inc.

717 Fifth Ave., New York, N.Y. 10022; (212) 350-8000

Total assets managed $17,400,000,000
Non-U.S. pension assets $830,000,000
U.S. discretionary tax-exempt assets managed:
Total $14,800,000,000
International $20,000,000
Active bond accounts $20,000,000
Global $1,500,000,000
Active bond accounts $1,500,000,000
U.S. tax-exempt clients 47

Fischer Francis Trees & Watts Inc. actively manages global, international and single-currency fixed-income portfolios. Within client-defined benchmarks and guidelines, portfolios are allocated among global markets; duration and foreign exchange exposures are determined within and across those markets.

Stephen C. Francis (London) and S. Bruce Kauffman (New York) are client contacts.

Franklin Resources Inc.

777 Mariners Island Blvd., San Mateo, Calif. 94404; (415) 378-8639

Total assets managed $47,000,000,000
U.S. discretionary tax-exempt assets managed:
Total $10,295,000,000
Global $200,000,000
Active bond accounts $200,000,000
Minimum separate account $10,000,000

Franklin Resources Inc., working within duration and currency exposure parameters, firm uses fundamental economic research to invest on a total return basis, relative to a benchmark index.

Rupert Johnson is chief investment officer; Jeff Murray is client contact.

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FX Concepts Inc.
100 Maiden Lane, New York, N.Y. 10038; (212) 363-7450

Currency overlay assets	$458,000,000
U.S. tax-exempt clients	15
Minimum separate account	$14,000,000

FX Concepts Inc., a foreign exchange manager, treats currency as a separate asset class; it does not manage any of the underlying assets.

The firm bases its approach on signals from a quantitative and technical proprietary model.

John R. Taylor is chief investment officer; John R. Serhant is client contact.

General Electric Investments
3003 Summer St., Sixth Floor, Stamford, Conn. 06905; (203) 326-2300

Total assets managed	$34,959,000,000
Non-U.S. pension assets	$59,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$28,066,000,000
International	$1,854,000,000
Active equity accounts	$1,854,000,000
Global	$10,000,000
Active equity accounts	$10,000,000
U.S. tax-exempt clients	10
Minimum separate account	$10,000,000

General Electric Investments' international equity assets were committed most heavily to Japan, the United Kingdom, France, Spain and Hong Kong. Its global equity assets were committed most heavily to Japan, the United Kingdom, the United States, France and Hong Kong.

The firm uses a top-down, bottom-up approach to find countries with favorable economic climates and companies that demonstrate potential for strong earnings growth and whose worth has not been fully recognized by the market. Its focus is on long-term market cycles and medium- to large-size companies. A two- to five-year horizon is used, with low turnover.

In addition to assets listed above, $790 million are managed on the firm's behalf by external managers.

The firm runs $2.756 billion in hedging and Nikkei options programs; $2.404 billion of the underlying assets are managed internally.

Arthur Bahr is chief investment officer; Geoffrey Norman is client contact.

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THE CONFEDERATION LIFE GROUP OF COMPANIES
ATLANTA - TORONTO - LONDON

Global Fixed Income Advisors
751 Broad St., 2 Plaza, Newark, N.J. 07102; (201) 802-8062

Total assets managed	$5,031,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$1,807,000,000
International	$146,000,000
Active bond accounts	$146,000,000
Global	$1,661,000,000
Active bond accounts	$1,661,000,000
U.S. tax-exempt clients	34
Minimum separate account	$20,000,000

Global Fixed Income Advisors' fixed-income approach emphasizes fundamental analysis of currencies and bond markets, but uses technical analysis to take advantage of short-term opportunities as they arise in the marketplace.

The firm runs $412 million of discretionary tax-exempt assets in currency hedging programs; all of the underlying assets are managed internally.

Eileen A. Whalen is client contact.

Globe Finlay Inc.
200 Park Ave., New York, N.Y. 10166; (212) 557-7022

Total assets managed	$2,254,000,000
Non-U.S. pension assets	$757,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$1,432,000,000
International	$1,080,000,000
Active equity accounts	$1,080,000,000
Global	$352,000,000
Active equity accounts	$345,000,000
Balanced	$7,000,000
U.S. tax-exempt clients	40
Minimum separate account	$20,000,000

Globe Finlay Inc.'s international equity assets were committed most heavily to Japan, the Netherlands, Sweden, France and Germany. Its global equity assets were committed most heavily to Japan, the United States, the Netherlands, Switzerland and Germany.

The firm manages active equity portfolios with global, EAFE, Europe-only, Japan-only and Pacific Basin mandates. The investment process is top-down, bottom-up with stock selection based on identifying well-managed companies with credible, sustainable growth rates and that are valued attractively according to local market criteria.

Francis Finlay is chief investment officer; Mr. Finlay and Ruth Schladovsky is client contact.

Grantham, Mayo, Van Otterloo & Co.
40 Rowes Wharf, Boston, Mass. 02110; (617) 330-7500

Total assets managed	$8,541,000,000
Non-U.S. pension assets	$588,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$7,458,000,000
International	$2,356,000,000
Active equity accounts	$2,356,000,000
Global	$881,000,000
Active equity accounts	$881,000,000
U.S. tax-exempt clients	124
Minimum separate account	$50,000,000

Grantham, Mayo, Van Otterloo & Co.'s international equity assets were committed most heavily to the United Kingdom, Germany, the Netherlands, France and Japan.

In its active portfolios, the firm emphasizes economic value over the many non-economic reasons for owning stocks that collectively constitute "comfort" in the eyes of other investors. Its quantitative portfolios have a value bias, but are managed using an approach that combines value-, momentum- and neglect-based stock selection criteria.

Eyk Van Otterloo and Jeremy Grantham are chief investment officer; Susan K. Randall is client contact.

G.T. Capital Management
50 California St., 27th Floor, San Francisco, Calif. 94111-4624; (415) 392-6181

Total assets managed	$4,410,000,000
Non-U.S. pension assets	$100,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$543,000,000
International	$435,000,000
Active equity accounts	$401,000,000
Active bond accounts	$15,000,000
Cash	$19,000,000
Global	$108,000,000
Active equity accounts	$100,000,000
Active bond accounts	$4,000,000
Cash	$4,000,000
U.S. tax-exempt clients	5
Minimum separate account	$10,000,000

G.T. Capital Management Inc.'s international equity assets were committed most heavily to Japan, Hong Kong, the United Kingdom, Spain and Germany. Its global equity assets were committed most heavily to the United States, Hong Kong, Japan, France and Germany.

The firm's equity approach emphasizes early identification of major international trends, targeting appropriate countries and companies through which to exploit these trends. Its fixed-income strategy focuses on currency management, emphasizing flexible maturity rates.

F. Christian Wignall is chief investment officer; Earle A. Malm II is client contact.

HD International
126 E. 56th St., New York, N.Y. 10022; (212) 753-0600

Total assets managed	$1,503,000,000
Non-U.S. pension assets	$464,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$827,000,000
International	$820,000,000
Active equity accounts	$777,000,000
Balanced	$43,000,000
Global	$7,000,000
Active equity accounts	$7,000,000
U.S. tax-exempt clients	20
Minimum separate account	$20,000,000

HD International's international equity assets were committed most heavily to Japan, the United Kingdom, France, Switzerland and Germany. Its global equity assets were committed most heavily to the United States, the United Kingdom, France, Japan and Switzerland.

The firm is a top-down growth manager with strict valuation disciplines. Clear definitions of growth are applied to country/sector/stock selection. Country allocations are driven by internal rate-of-return country forecasts.

James Heyworth-Dunne is chief investment officer; Francine R. Elster is client contact.

Hill Samuel/Investment Advisers Ltd.
1100 Dain Tower, Box 357, Minneapolis, Minn. 55940; (612) 371-7780

Total assets managed	$885,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$880,000,000
International	$857,000,000
Active equity accounts	$824,000,000
Balanced	$33,000,000
Global	$23,000,000
Active equity accounts	$13,000,000
Active bond accounts	$10,000,000
U.S. tax-exempt clients	30
Minimum separate account	$15,000,000

Hill Samuel/Investment Advisers Ltd.'s international equity assets were committed most heavily to the United Kingdom, Japan, Australia, Germany and the Netherlands.

Its global equity assets were committed most heavily to the United Kingdom, the United States, Japan, Australia and the Netherlands.

The firm's investment approach is value oriented.

Roy Gillson is chief investment officer; Anne Holloran is client contact.

IDS International Inc.
IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-1335

Total assets managed	$1,329,000,000
Non-U.S. pension assets	$367,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$696,000,000
International	$547,000,000
Active equity accounts	$478,000,000
Other	$69,000,000
Global	$149,000,000
Active equity accounts	$149,000,000
U.S. tax-exempt clients	19
Minimum separate account	$10,000,000

IDS International Inc.'s international equity assets were committed most heavily to Japan, Switzerland, France, Germany and the United Kingdom. Its

Firms assigning assets to others

	U.S. $ millions		
	Total	International	Global
Common Fund	1,761	1,098	663
General Electric	790	790	0
Vanguard Group	677	677	0
Boatmen's Trust	129	129	0

U.S. institutional, discretionary tax-exempt assets

global equity assets were committed most heavily to the United States, Japan, France, Switzerland and the United Kingdom.

The firm's approach is top-down, bottom-up. Based on a macroeconomic, geopolitical overview, assets are allocated among stocks, bonds and cash; currency views are taken; and countries are distributed into economic categories and weighted. Stocks are actively selected through fundamental analysis. Its passive strategy selects stocks through optimization designed to simulate a specified benchmark.

Peter L. Lamaison is chief investment officer; Diane K. Vener is client contact.

Interinvest Corp.

84 State St., Boston, Mass. 02109; (617) 723-7870

Total assets managed	$127,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$78,000,000
International	$15,000,000
Active equity accounts	$13,000,000
Active bond accounts	$2,000,000
Global	$63,000,000
Active equity accounts	$60,000,000
Active bond accounts	$1,000,000
Balanced	$2,000,000
U.S. tax-exempt clients	36
Minimum separate account	$1,000,000

Interinvest Corp.'s international equity assets were committed most heavily to Japan, Hong Kong, Spain, Australia and Singapore. Its global equity assets were committed most heavily to the United States, Japan, Hong Kong, Australia and Singapore.

The firm's asset allocation approach is top-down, using macroeconomic, political and currency analysis to determine country, currency and sector weighting.

Hans P. Black is chief investment officer; Stanley T. Schmidt is client contact.

Invesco MIM International

101 E. 52nd St., 25th Floor, New York, N.Y. 10022; (212) 888-5820

Total assets managed	$629,000,000
Non-U.S. pension assets	$339,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$290,000,000
International	$118,000,000
Active equity accounts	$118,000,000
Global	$172,000,000
Active equity accounts	$55,000,000
Active bond accounts	$29,000,000
Balanced	$88,000,000
U.S. tax-exempt clients	9
Minimum separate account	$10,000,000

Invesco MIM International's international equity assets were committed most heavily to Japan, the United Kingdom, Hong Kong, Australia and Switzerland. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Hong Kong and Australia.

The firm's asset allocation/country weightings are top-down. Security selection is bottom-up, based on company fundamentals in local market contexts. Its equity approach is value-oriented, using sector rotation. Its fixed-income strategy employs objective analysis of relative liquidity and available real yields.

Donald Walker is chief investment officer; Frank J. Keller is client contact.

Lexington Management

Park 80 W., Plaza Two, Saddle Brook, N.J. 07662; (201) 845-7300

Total assets managed	$2,273,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$820,000,000
International	$16,000,000
Active bond accounts	$16,000,000
Global	$256,000,000
Active equity accounts	$256,000,000
U.S. tax-exempt clients	43
Minimum separate account	$10,000,000

Lexington Management Corp.'s global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Germany and France.

The firm treats equities worldwide as a single asset class. It attempts to isolate the best ideas — stocks, themes, sectors, countries or currencies — in its investment strategies.

William S. Stack is chief investment officer; Joseph Barcic Jr. is client contact.

Lombard Odier International Portfolio Management Ltd.

Norfolk House, 13 Southampton Place, London, WC1 2AJ, U.K.; 71-831-2350

Total assets managed	$3,097,000,000
Non-U.S. pension assets	$139,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$343,000,000
International	$272,000,000
Active equity accounts	$115,000,000
Active bond accounts	$157,000,000
Global	$71,000,000
Active equity accounts	$71,000,000
U.S. tax-exempt clients	6
Minimum separate account	$10,000,000

Lombard Odier International Portfolio Management Ltd.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Southeast Asia and France. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Canada and Germany.

The firm uses a top-down approach for strategic asset allocation and a bottom-up approach for stock selection, with assets divided between the Far East and Europe following market analysis.

Robert van Maasdijk is chief investment officer; James C. Vogelzang, (303) 629-1900, is client contact.

MacKay-Shields Financial

9 W. 57th St., New York, N.Y. 10019; (212) 230-3895

Total assets managed	$7,107,000,000
Non-U.S. pension assets	$920,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$5,460,000,000
International	$34,000,000
Active equity accounts	$34,000,000
Global	$52,000,000
Active equity accounts	$52,000,000
U.S. tax-exempt clients	59
Minimum separate account	$30,000,000

MacKay-Shields Financial Corp.'s international equity assets were committed most heavily to Japan, the United Kingdom, Australia, Spain and Hong Kong. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Australia and Spain.

The firm's equity approach uses active country allocation, driven by quantitative valuation models. Its fixed-income approach emphasizes active country allocation, with active management of duration and yield curves within countries secondary. Currency hedging is used at extremes.

Christina Seix is chief investment officer; Krista M. Woodall is client contact.

Marathon-London

140A Gloucester Mansions, Cambridge Circus, London, WC2H 8HD, U.K. 71-497-2211

Total assets managed	$300,000,000
Non-U.S. pension assets	$52,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$76,000,000
International	$12,000,000
Active equity accounts	$12,000,000
Global	$58,000,000
Active equity accounts	$58,000,000
U.S. tax-exempt clients	4
Minimum separate account	$25,000,000

Marathon-London's international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Singapore and France. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Singapore and Germany.

The firm uses flexible, qualitative disciplines adaptable to changing economic environment and different markets. To minimize risk, separate tools are used to identify attractive countries, sectors and companies.

Jeremy J. Hosking is chief investment officer; Helen Blanchard, (203) 268-0105, is client contact.

Marvin & Palmer Associates

1 Commerce Center, Suite 1100, Wilmington, Del. 19801; (302) 573-3570

Total assets managed	$530,000,000
Non-U.S. pension assets	$150,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$350,000,000
International	$230,000,000
Active equity accounts	$230,000,000
Global	$120,000,000
Active equity accounts	$120,000,000
U.S. tax-exempt clients	17
Minimum separate account	$10,000,000

Marvin & Palmer Associates Inc.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Scandinavia and Mexico. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Germany and Mexico.

The firm has a top-down philosophy, with focus on country, currency, theme and individual stock analysis.

David Marvin is chief investment officer; Jon Stallonius is client contact.

Massachusetts Financial Services

500 Boylston St., Boston, Mass. 02116; (617) 954-5757

Total assets managed	$25,560,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$1,938,000,000
International	$48,000,000
Active bond accounts	$48,000,000
Global	$265,000,000
Active bond accounts	$265,000,000
U.S. tax-exempt clients	23
Minimum separate account	$20,000,000

Massachusetts Financial Services identifies undervalued world government bond and currency markets through fundamental valuation and active management. It emphasizes diversification and innovative hedging strategies to control risk and maximize total return.

The firm runs $56 million of discretionary tax-exempt assets in currency hedging, options and futures programs; all of the underlying assets are managed internally.

A. Keith Brodkin is chief investment officer; Ellen M. McCaffery is client contact.

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CLEMENTE CAPITAL, INC.
767 THIRD AVENUE, NEW YORK, NY 10017
PHONE: (212) 759-3339 FAX: (212) 759-1090

Clemente Capital, Inc.

Matuschka Group
15 Valley Drive, Greenwich, Conn. 06831; (203) 869-5866

Total assets managed $3,572,000,000
Non-U.S. pension assets $201,000,000
U.S. discretionary tax-exempt assets managed:
Total $86,000,000
International $86,000,000
Active equity accounts $86,000,000
U.S. tax-exempt clients 1
Minimum separate equity account $10,000,000
Minimum currency account $50,000,000

Matuschka Group's international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Austria and Switzerland.

The firm's equity approach emphasizes stability of country weightings. It also considers active industry rotation and active currency management. Its currency management approach is fundamental and technical, and attempts to exploit currency trends.

The firm runs $709 million of discretionary tax-exempt assets in currency overlay programs; $86 million of the underlying assets are managed internally.

Michael Kraemer is chief investment officer; Christopher J. Carey is client contact.

Mercator Asset Management
2400 E. Commercial Blvd., Fort Lauderdale, Fla. 33308; (305) 771-9660

U.S. discretionary tax-exempt assets managed:
International $1,000,000,000

The above assets are a *Pensions & Investments* estimate. The firm would not complete a questionnaire.

Mitchell Hutchins Asset Management Inc.
1285 Avenue of the Americas, New York, N.Y. 10019; (212) 713-4000

Total assets managed $31,667,000,000
Non-U.S. pension assets $391,000,000
U.S. discretionary tax-exempt assets managed:
Total $9,486,000,000
Global accounts $356,000,000
Active bond accounts $356,000,000
U.S. tax-exempt clients 315
Minimum separate account $10,000,000

Mitchell Hutchins Asset Management Inc. offers several products. The investment approach varies with each product.

Stephen E. Canter and Paul A. Becker are chief investment officers; Sallie E. Proctor is client contact.

Morgan Grenfell Investment Services Ltd.
20 Finsbury Circus, London, EC2M 1NB, U.K.; 71-256-7500

Total assets managed $2,843,000,000
Non-U.S. pension assets $97,000,000
U.S. discretionary tax-exempt assets managed:
Total $2,340,000,000
International $2,122,000,000
Active equity accounts ... $1,947,000,000
Active bond accounts $95,000,000
Balanced $80,000,000
Global $207,000,000
Active equity accounts $17,000,000
Active bond accounts $190,000,000
U.S. tax-exempt clients 33
Minimum separate account $10,000,000

Morgan Grenfell Investment Services Ltd.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Switzerland and Australia.

Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Switzerland and Australia.

The firm's equity strategy takes a bottom-up approach with emphasis on growth stock selection. Market allocation and currency analysis are secondary. Its fixed-income approach combines active management of currencies, bond markets and issues. Currency and bond market exposure decisions are separated through currency hedging in the forward and currency options markets. Bond market and issue selection are separated through the use of international bond futures.

The firm runs $36 million of discretionary tax-exempt assets in international bond futures; the underlying assets aren't managed internally.

Michael Bullock is chief investment officer; James E. Minnick is client contact.

The master trust/custody and global custody directory will be published Oct. 14.

J.P. Morgan Investment Management Inc.
522 Fifth Ave., New York, N.Y. 10036; (212) 837-2300

Total assets managed $65,330,000,000
Non-U.S. pension assets $678,000,000
U.S. discretionary tax-exempt assets managed:
Total $45,147,000,000
International $3,493,000,000
Active equity accounts ... $1,512,000,000
Active bond accounts $1,840,000,000
Balanced $141,000,000
Global $199,000,000
Active equity accounts $104,000,000
Active bond accounts $95,000,000
U.S. tax-exempt clients 500

J.P. Morgan Investment Management Inc. actively manages asset mix, currency exposure and security selection to maximize total return and minimize risk in U.S. dollars through a systematic decision-making process. Strategies are tailored to meet client objectives.

The firm runs $3.631 billion of discretionary tax-exempt assets in currency hedging; $514 million of the underlying assets are managed internally.

David L. Brigham is chief investment officer; John R. Thomas is client contact.

Morgan Stanley Asset Management
1221 Avenue of the Americas, 21st Floor, New York, N.Y. 10020; (212) 296-7179

Total assets managed $18,771,000,000
Non-U.S. pension assets $135,000,000
U.S. discretionary tax-exempt assets managed:
Total $15,699,000,000
International $1,161,000,000
Active equity accounts ... $1,129,000,000
Balanced $32,000,000
Global $215,000,000
Active equity accounts $215,000,000
U.S. tax-exempt clients 387
Minimum separate account $10,000,000

Morgan Stanley Asset Management's international equity assets were committed most heavily to Japan, Germany, the Netherlands, the United Kingdom and Switzerland.

Its global equity assets were committed most heavily to the United States, Germany, Japan, the United Kingdom and Canada.

The firm uses a bottom-up, value-oriented approach. Its selective process relies heavily on fundamental analysis and screening of international data bases. Currency decisions are made separately.

Top 50 international account managers

	U.S. $ millions
Capital Guardian	4,413
Rowe Price-Fleming Int'l	3,861
J.P. Morgan	3,493
Brinson Partners	3,045
Oechsle Int'l	2,492
Bankers Trust	2,135
General Electric	1,854
Batterymarch Financial	1,680
Chase Investors	1,331
Morgan Stanley	1,161
Boston Int'l	1,042
Mercator Asset **	1,000
Alliance Capital	857
HD Int'l	820
Wellington Mgmt.	719
Julius Baer	691
Aetna Capital	591
Scudder Stevens & Clark	564
IDS Int'l	547
Travelers	513
Arnhold & S. Bleichroeder	475
ANB Investment	440
Brown Brothers Harriman *	394
N.M. Rothschild	386
Citibank Investment	343

U.S., institutional, discretionary, tax-exempt assets
* as of Dec. 31
** P&I estimate

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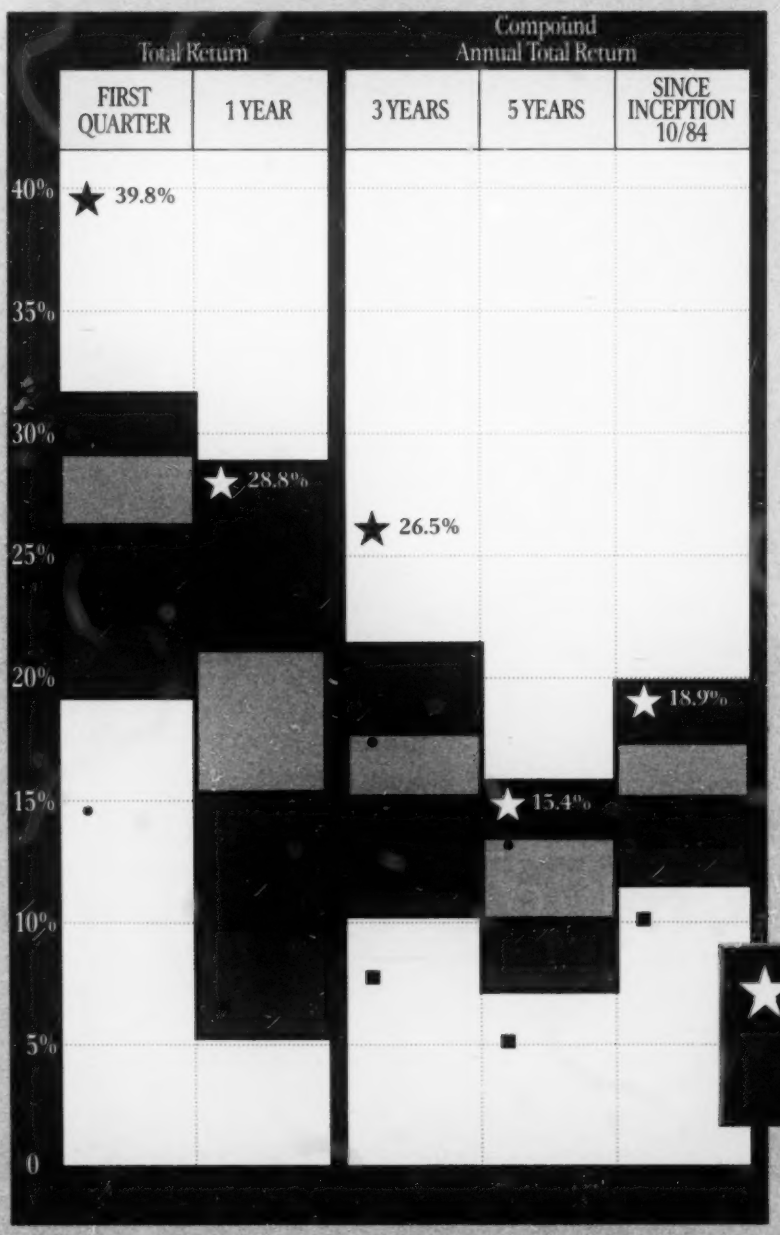

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All periods ending 3/31/91. Source: Callan Associates, Small Capitalization Equity Universe.

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For further information please contact
Angela Z. Allen, President

3060 Peachtree Road NW
Suite 225
Altanta, GA 30305
(404) 364-2188

Barton M. Biggs is chief investment officer; Patricia Blake is client contact.

Nikko Capital Management (U.S.A.) Inc.

350 Park Ave., New York, N.Y. 10022; (212) 319-2730

Total assets managed	$1,990,000,000
Non-U.S. pension assets	$18,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$436,000,000
International	$267,000,000
Active equity accounts	$170,000,000
Indexed equity accounts	$97,000,000
Global	$169,000,000
Indexed equity accounts	$169,000,000
U.S. tax-exempt clients	5
Minimum separate account	$5,000,000

Nikko Capital Management (U.S.A.) Inc.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and Switzerland. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, France and the Netherlands.

The firm offers active strategies for global and international in which quantitative models are used in the decision-making process, especially for Japan and the Pacific Basin. Specialized products include active strategies that invest in Japanese small-cap stocks and Pacific Basin emerging markets.

Stanley Kirtman is chief investment officer; David Rochman is client contact.

Nomura Capital Management

180 Maiden Lane, Suite 2903, New York, N.Y. 10038; (212) 509-8181

Total assets managed	$3,454,000,000
Non-U.S. pension assets	$17,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$2,887,000,000
International	$2,858,000,000
Active equity accounts	$2,770,000,000
Active bond accounts	$88,000,000
Global	$26,000,000
Active equity accounts	$26,000,000
U.S. tax-exempt clients	24
Minimum separate equity account	$5,000,000
Minimum separate bond account	$10,000,000

Nomura Capital Management Inc.'s international equity assets were committed most heavily to Japan, the United Kingdom, Australia, Malaysia and Hong Kong.

Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, France and Germany.

The firm provides global, non-U.S. or regional investments with concentration in high return sectors and stocks screened through original fundamental research and relative valuation. Emphasis is greater on sector and stock selection than on timing markets and currencies. The investment process is disciplined, using quantitative tools.

Masahiko Nemoto is chief investment officer; Brian X. Fitzgibbon is client contact.

Oechsle International Advisors

1 International Place, Boston, Mass. 02110; (617) 330-8810

Total assets managed	$2,692,000,000
Non-U.S. pension assets	$41,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$2,651,000,000
International	$2,492,000,000
Active equity accounts	$2,492,000,000
Global	$159,000,000
Active equity accounts	$77,000,000
Active bond accounts	$82,000,000
Tax-exempt clients	55
Minimum separate account	$20,000,000

Oechsle International Advisors' international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Hong Kong and Switzerland. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Germany and Hong Kong.

The firm's equity approach emphasizes bottom-up stock selection, aggressive top-down country allocation and value orientation. The investment horizon is 18 to 24 months; portfolios are constructed with a limited number of holdings. Investments are managed in a minimum of eight and a maximum of 14 country markets.

Walter Oechsle is chief investment officer; Stephen Langer is client contact.

Pacific Investment Management Co.

840 Newport Center Drive, Suite 360, P.O. Box 9000, Newport Beach, Calif. 92658-9030; (714) 640-3031

Total assets managed	$31,762,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$31,039,000,000
Global	$726,000,000
Active bond accounts	$726,000,000
U.S. tax-exempt clients	135
Minimum separate account	$50,000,000

Pacific Investment Management Co.'s fixed-income style is a top-down, core approach that avoids extreme swings in duration, country and currency exposure. Major strategy shifts are driven by long-term trends; significant value is added through the use of sophisticated analytical tools.

W.H. Gross is chief investment officer; Jim Muzzy and Margaret Riley is client contact.

PanAgora Asset Management

260 Franklin St., Suite 2200, Boston, Mass. 02110; (617) 439-6300

Total assets managed	$11,447,000,000
Non-U.S. pension assets	$2,016,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$9,510,000,000
International	$954,000,000
Active equity accounts	$270,000,000
Indexed equity accounts	$651,000,000
Active bond accounts	$33,000,000
Global	$1,897,000,000
Active bond accounts	$1,897,000,000
U.S. tax-exempt clients	80
Minimum separate account	$25,000,000

PanAgora Asset Management's international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Spain and Sweden.

The firm is a global quantitative manager, offering equity, fixed-income, currency and asset allocation strategies. Core management and global tactical asset allocation are emphasized.

The firm runs $1.954 billion of discretionary tax-exempt assets in managed currency overlay programs; all of the underlying assets are managed internally.

Richard A. Crowell and Alan J. Brown are chief investment officers; Miriam F. Cooper is client contact.

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Payden & Rygel
333 S. Grand Ave., Suite 3250, Los Angeles, Calif. 90071; (213) 625-1900

Total assets managed	$9,300,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$9,300,000,000
International	$300,000,000
Active bond accounts	$291,000,000
Cash	$9,000,000
Global	$900,000,000
Active bond accounts	$873,300,000
Cash	$27,000,000
U.S. tax-exempt clients	104
Minimum separate account	$15,000,000

Payden & Rygel offers low-volatility, active fixed-income management, producing consistent returns in both strong and weak U.S. dollar environments.

Joan A. Payden is chief investment officer; John Isaacson is client contact.

PCM International Inc.
820 Morris Turnpike, Suite 102, Short Hills, N.J. 07078; (201) 912-7500

Total assets managed	$610,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$565,000,000
International	$565,000,000
Active equity accounts	$565,000,000
U.S. tax-exempt clients	17
Minimum separate account	$10,000,000

PCM International Inc.'s international equity assets were committed most heavily to Japan, France, Germany, Switzerland and the United Kingdom.

The firm seeks to own a limited number of stocks that offer the best price relative to future earnings prospects; market and currency risks are managed with a defensive overlay.

Cassandra Hardman and Barry Gillman are chief investment officers; Jeffrey Kutler is client contact.

Philippe Investment Management
122 E. 42nd St., New York, N.Y. 10168; (212) 687-3616

Total assets managed	$705,000,000
Non-U.S. pension assets	$120,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$585,000,000
International	$246,000,000
Active equity accounts	$246,000,000
Global	$149,000,000
Active equity accounts	$149,000,000
U.S. tax-exempt clients	7
Minimum separate account	$25,000,000

Philippe Investment Management's international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and Switzerland. Its global equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and the United States.

The firm incorporates both top-down and bottom-up strategies. Equal weight is placed on country, sector and stock decisions. Portfolios are diversified with about 150 securities and moderate use is made of cash equivalents. Generally, one-third of the holdings is in small-cap issues; 30% to 40% are not in the representative indexes.

Claudette Mayer is client contact.

Pictet International Management Ltd.
Cutlers Gardens, 5 Devonshire Square, London, EC2M 4LD, U.K.; 071-283-7471

Total assets managed	$1,600,000,000
Non-U.S. pension assets	$504,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$473,000,000
International	$473,000,000
Active equity accounts	$473,000,000
U.S. tax-exempt clients	12

Pictet International Management Ltd. uses an active management style for EAFE accounts, featuring a systematic, disciplined stock selection technique. Share value is linked to fundamentals, identifying the best value relative to historical valuations within each market. Regional mandates and international small-cap accounts are actively managed using a more judgmental stock selection technique.

Bruce Albrecht is chief investment officer; Rod Hearn is client contact.

Rowe Price-Fleming International Inc.
100 E. Pratt St., Baltimore, Md. 21202; (301) 547-2141

Total assets managed	$4,901,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$3,865,000,000
International	$3,861,000,000
Active equity accounts	$3,285,000,000
Active bond accounts	$184,000,000
Indexed bond accounts	$392,000,000
Global	$4,000,000
Active bond accounts	$4,000,000
U.S. tax-exempt clients	22
Minimum separate account	$20,000,000

Rowe Price-Fleming International Inc.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and the Netherlands.

The firm's uses an active top-down, bottom-up approach. Large- and/or small-cap stocks are selected, using worldwide research capabilities. Its fixed-income strategy is fundamentally oriented and actively manages credit markets and currency exposure.

Martin G. Wade is chief investment officer; George A. Murnaghan is client contact.

The Putnam Cos. Inc.
1 Post Office Square, Boston, Mass. 02109; (617) 292-1000

Total assets managed	$44,100,000,000
Non-U.S. pension assets	$102,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$8,800,000,000
International	$322,000,000
Active equity accounts	$142,000,000
Active bond accounts	$180,000,000
Global	$554,000,000
Active bond accounts	$554,000,000
U.S. tax-exempt clients	92
Minimum separate account	$10,000,000

The Putnam Cos. Inc.'s international equity assets were committed most heavily to Japan, the Netherlands, Spain, Switzerland and the United Kingdom.

The firm's global fixed-income approach is systematic and active, seeking positive rates of return established in any given currency. Proprietary computer-driven models add value through currency management. The top-down, bottom-up equity style is value-oriented, seeking stocks selling below fair value.

Anthony W. Regan is chief investment officer; Mary Ann Morrice is client contact.

RCB International Inc.
29 Federal St., Stamford, Conn. 06901; (203) 977-7000

Tax-exempt assets assigned to others:	
International	$342,000,000
Global	$179,000,000
U.S. tax-exempt clients	46
Minimum separate account	$50,000,000

RCB International Inc. uses a multiple adviser approach in each of its investment programs. Chosen advisers have a proven degree of skill in stock selection and an expertise in a particular geographic region.

Edgar W. Barksdale is chief investment officer and client contact.

RCM Capital Management
4 Embarcadero Center, Suite 2900, San Francisco, Calif. 94111; (415) 954-5474

Total assets managed	$19,689,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$16,312,000,000
Global	$120,000,000
Active bond accounts	$120,000,000
U.S. tax-exempt clients	129

RCM Capital Management's currency and bond decisions are made separately. It uses an active currency hedging profile and tactical allocation decisions (vs. U.S. alternatives) are made to enhanced domestic returns.

Claude N. Rosenberg Jr. is senior investment officer; Melody L. McDonald is client contact.

Rogge Global Partners
1720 Post Road E., Suite 12, Westport, Conn. 06880; (203) 254-725[illegible]

Total assets managed	$577,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$520,000,000
International	$289,000,000
Active bond accounts	$289,000,000
Global accounts	$231,000,000
Active bond accounts	$231,000,000
U.S. tax-exempt clients	2

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Currency overlay/hedge managers

	U.S. $ millions: Total currency overlay	U.S. $ millions: Underlying assets managed internally
General Electric	2,756	2,404
PariAgora Asset	1,954	1,954
County NatWest	980	0
Matuschka Group	709	86
Strategic Investment	600	20
FX Concepts	458	0
Boston Int'l	409	409
Citibank Investment	194	194
Massachusetts Financial	56	56
Morgan Grenfell	36	0
Total	18,443	8,851

U.S. institutional, discretionary tax-exempt assets

Minimum separate account $25,000,000

Rogge Global Partners — formerly Bewise, Goodman International PLC applies relative value analysis across countries. The focus is on active country allocation in liquid markets, using high-quality securities with maturities at the medium to long end of the market.

Olaf Rogge is chief investment officer; Julie M. Cochran is client contact.

N.M. Rothschild International Asset Management Ltd.

Five Arrows House, St. Swithins Lane, London EC4N 8NR, U.K.; 071-280-5000

Total assets managed $654,000,000
Non-U.S. pension assets $177,000,000
U.S. discretionary tax-exempt assets managed:
Total $417,000,000
International $386,000,000
Active equity accounts $29,000,000
Active bond accounts $357,000,000
Global $31,000,000
Active bond accounts $31,000,000
U.S. tax-exempt clients 4
Minimum separate account $10,000,000

N.M. Rothschild International Asset Management Ltd.'s fundamental style uses macroeconomic analysis, emphasizing quality, discipline and patience. Currency is managed as a separate asset class.

The firm runs $2.036 billion of discretionary tax-exempt assets in currency overlay programs; none of the underlying assets is managed internally.

Kenneth West is chief investment officer; Giles Marshall is client contact.

Frank Russell Trust Co.

909 A St., P.O. Box 1454, Tacoma, Wash. 98401; (206) 572-2282

Tax-exempt assets assigned to others:
International $738,000,000
U.S. tax-exempt clients 193
Minimum separate account $5,000,000

Frank Russell Trust Co. is a manager of managers.

Paul Kaltinick and Lynn Anderson are chief investment officers; Brian F. Barker is client contact.

SBC Portfolio Management International Inc.

1 World Trade Center, Suite 8935, New York, N.Y. 10048; (212) 432-8900

Total assets managed $593,000,000
Non-U.S. pension assets $43,000,000
U.S. discretionary tax-exempt assets managed:
Total $462,000,000
International $389,000,000
Active equity accounts $389,000,000
Global $14,000,000
Active equity accounts $14,000,000
U.S. tax-exempt clients 25
Minimum separate account $10,000,000

SBC Portfolio Management International Inc.'s international equity assets were committed most heavily to Japan, the United Kingdom, Spain, Switzerland and France.

The firm uses a top-down equity approach, relying on information sources to make strong bets against EAFE, when prudent, while investing across the whole spectrum of the index. Active currency management and hedging are used when necessary.

Peter J. Morant is chief investment officer; John W. Conlin is client contact.

Schroder Capital Management International

787 Seventh Ave., 29th Floor, New York, N.Y. 10019; (212) 841-3838

Total assets managed $4,700,000,000
Non-U.S. pension assets $571,000,000
U.S. discretionary tax-exempt assets managed:
Total $3,545,000,000
International $3,644,000,000
Active equity accounts ... $3,644,000,000
Global $201,000,000
Active equity accounts $122,000,000
Active bond accounts $79,000,000
U.S. tax-exempt clients 41
Minimum separate account $25,000,000

Schroder Capital Management International's international equity assets were committed most heavily to Japan, the United Kingdom, France, Germany and Switzerland. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, France and Switzerland.

The firm emphasizes stock selection, supported by analysis from seven regional offices. Its begins with country selection based on three-year economic projections, then focuses on growth stocks within each country.

Richard R. Foulkes is chief investment officer; Sharon L. Haugh is client contact.

Scudder Stevens & Clark

345 Park Ave., New York, N.Y. 10154; (212) 326-6200

Total assets managed $3,796,000,000
Non-U.S. pension assets $180,000,000
U.S. discretionary tax-exempt assets managed:
Total $1,379,000,000
International $564,000,000
Active equity accounts $436,000,000
Active bond accounts $76,000,000
Balanced $52,000,000
Global $250,000,000
Active equity accounts $224,000,000
Active bond accounts $3,000,000
Balanced $23,000,000
Minimum separate account $10,000,000

Scudder Stevens & Clark's international equity assets were committed most heavily to Japan, the United Kingdom, the Netherlands, Germany and Switzerland. Its global equity assets were committed most heavily to the United States, Switzerland, the United Kingdom, Japan and Germany.

The firm makes assessments of the global economy as well as local market and currency factors, which are meshed with in-depth security analysis. Quantitative and qualitative research is used.

Nicholas Bratt is chief investment officer; Edmund Thimme Jr. is client contact.

Smith Barney Global Capital Management Inc.

1345 Avenue of the Americas, New York, N.Y. 10105; (212) 698-6131

Total assets managed $290,000,000
Non-U.S. pension assets $46,000,000
U.S. discretionary tax-exempt assets managed:
Total $245,000,000
International $89,000,000

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Active bond accounts	$89,000,000
Global	$156,000,000
Active bond accounts	$156,000,000
U.S. tax-exempt clients	3
Minimum separate account	$10,000,000

Smith Barney Global Capital Management Inc.'s active fixed-income portfolios employ a research-based modeling system, fundamental overlays and active currency decisions.

Bruce D. Sargent is chief investment officer; Jill B. Jordon is client contact.

State Street Bank and Trust
225 Franklin St., 29th Floor, Boston, Mass. 02110; (617) 654-3953

Total assets managed	$60,528,000,000
Non-U.S. pension assets	$4,617,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$53,545,000,000
International	$9,408,000,000
Active equity accounts	$2,160,000,000
Indexed equity accounts	$7,092,000,000
Indexed bond accounts	$156,000,000
Global	$40,000,000
Indexed equity accounts	$40,000,000
U.S. tax-exempt clients	126
Minimum separate account	$25,000,000

State Street Bank and Trust Co.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and Switzerland. Its global equity assets were committed most heavily to the United States, Japan, Germany, France and the United Kingdom.

The firm's active strategies use a value-oriented, systematic process, selecting the most attractive securities and countries in a risk-controlled fashion. Passive products use a quantitative, full-replication approach.

The firm runs $881 million of discretionary tax-exempt assets in currency overlay programs; all of the underlying assets are managed internally.

Nicholas A. Lopardo is chief investment officer; Peter E. Braun is client contact.

P&I will publish an employee benefits update July 22.

Strategic Investment Partners Inc.
2000 K St. N.W., Suite 400, Washington, D.C. 20006; (202) 785-2300

Total assets managed	$20,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$20,000,000
International	$20,000,000
Active equity accounts	$20,000,000
Tax-exempt assets assigned to others:	
International accounts	$931,000,000
Global accounts	$457,000,000
U.S. tax-exempt clients	1
Minimum separate account	$20,000,000

Strategic Investment Partners Inc.'s tactical asset allocation and currency management are handled internally. It uses quantitative tools and judgment to tilt its portfolios toward pockets of significant value; investment strategy is executed through specialist submanagers. Equity portfolios combine active and passive management to achieve efficient, cost-effective diversification.

The firm has $600 million in currency hedging programs; $20 million of the underlying assets are managed internally.

Hilda Ochoa is chief investment officer; Ms. Ochoa and Mary Chelsi are client contacts.

TCW Global Advisors
400 S. Hope St., Suite 500, Los Angeles, Calif. 90071; (213) 683-4000

Total assets managed	$1,639,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$1,430,000,000
Global	$1,430,000,000
Other	$1,430,000,000
U.S. tax-exempt clients	17
Minimum separate account	$100,000,000

TCW Global Advisors uses a top-down asset allocation process, supported by quantitative analytical support. Its investment universe is limited to six markets: the United States, the United Kingdom, France, Germany, Switzerland and Japan. Its goal is preservation of capital.

Charles Gave is chief investment officer; Thomas E. Larkin Jr. is client contact.

Templeton International
500 E. Broward Blvd., Suite 2100, Fort Lauderdale, Fla. 33394; (305) 764-7390

Total assets managed	$2,729,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$2,489,000,000
International	$175,000,000
Active equity accounts	$161,000,000
Active bond accounts	$14,000,000
Global	$2,314,000,000
Active equity accounts	$2,207,000,000
Active bond accounts	$107,000,000
U.S. tax-exempt clients	60
Minimum separate equity account	$10,000,000
Minimum separate bond account	$15,000,000

Templeton International's equity assets were committed most heavily to the United Kingdom, Spain, Canada, France and Hong Kong. Its global equity assets were committed most heavily to Australia, Hong Kong, the United Kingdom, the United States and Canada.

The firm's active approach takes a long-term perspective is seeking value worldwide.

Thomas L. Hansberger is chief investment officer; James R. Wood is client contact.

Travelers Corp.
1 Tower Square, Hartford, Conn. 06183-6030; (203) 277-0111

Total assets managed	$38,999,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$21,398,000,000
International	$513,000,000
Active equity accounts	$159,000,000
Indexed equity accounts	$327,000,000
Indexed bond accounts	$27,000,000
U.S. tax-exempt clients	1,635

Travelers Corp.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and the Netherlands.

The firm offers indexed and active accounts in both equities and fixed income. Geographic tilting and currency protection are offered.

Richard Shima is chief investment officer; Peter J. Zummo is client contact.

Van Eck Associates Corp.
122 E. 42nd St., New York, N.Y. 10168; (212) 687-5200

Total assets managed	$1,172,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$222,000,000
Global	$60,000,000
Active equity accounts	$60,000,000
U.S. tax-exempt clients	1
Minimum separate account	$5,000,000

Van Eck Associates Corp.'s global equity assets were committed most heavily to the United States, Germany, Japan, France and the Netherlands.

The firm specializes in gold-oriented investing, and assets are invested in gold equity worldwide and in bullion.

The firm identifies macroeconomic and political trends worldwide to determine currency, country, industry and security weightings and selections. It uses hedging instruments to protect the value of existing holdings. Quality, liquidity, long-term results and preservation of capital are emphasized.

John C. van Eck is chief investment officer; Michael G. Doorley is client contact.

The Vanguard Group
Vanguard Financial Center, Valley Forge, Pa. 19482; (215) 669-1000

Total assets managed	$62,440,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$15,371,000,000
International	$6,000,000
Indexed equity accounts	$6,000,000
Tax-exempt assets passed to others:	
International	$677,000,000
U.S. tax-exempt clients	1,720

The Vanguard Group Inc. offers four international mutual funds employing both active and passive management: Vanguard World Fund; Trustees' Commingled Fund; Vanguard International Equity Index Fund — European Portfolio; and Vanguard International Equity Index Fund — Pacific Portfolio. Schroder Capital Management International and Batterymarch Financial Management manage funds on behalf of the firm.

John C. Bogle is chief investment officer; James H. Gately is client contact.

Warburg Investment Management International
780 Third Ave., New York, N.Y. 10017; (212) 751-8340

Total assets managed	$2,595,000,000
Non-U.S. pension assets	$351,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$2,222,000,000
International	$1,767,000,000
Active equity accounts	$598,000,000
Active bond accounts	$1,155,000,000
Balanced	$14,000,000
Global	$455,000,000
Active equity accounts	$391,000,000
Active bond accounts	$45,000,000
Balanced	$19,000,000
U.S. tax-exempt clients	29
Minimum separate account	$10,000,000

Warburg Investment Management International Ltd.'s international equity assets were committed most heavily to Japan, the United Kingdom, Germany, Hong Kong and Singapore. Its global equity assets were committed most heavily to the United States, Japan, the United Kingdom, Germany, Switzerland and Hong Kong.

The firm's uses a top-down, bottom-up approach that follows 22 countries, investing in 14 to 16 countries. Portfolios are diversified with about 100 securities chosen by regional specialists, focusing on large- and medium-cap stocks.

Robert P.B. Michaelson is chief investment officer; Steven W. Golann is client contact.

Wellington Management Co.
75 State St., Boston, Mass. 02131; (617) 951-5000

Total assets managed	$47,132,000,000
Non-U.S. pension assets	$156,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$15,344,000,000
International	$719,000,000
Active equity accounts	$599,000,000
Active bond accounts	$120,000,000
Global	$33,000,000
Other	$33,000,000
U.S. tax-exempt clients	231
Minimum separate account	$10,000,000

Wellington Management Co.'s international equity assets were committed most heavily to Japan, the United Kingdom, France, Germany and Switzerland.

All portfolios are actively managed, and investment decisions are based on internal fundamental research. Top-down and bottom-up strategies are used.

Robert W. Doran is chief investment officer; Dena G. Willmore is client contact.

Wells Fargo Nikko Investment Advisors
45 Fremont St., San Francisco, Calif. 94105; (415) 597-2700

Total assets managed	$87,730,000,000
Non-U.S. pension assets	$5,301,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$81,400,000,000
International	$3,419,000,000
Active equity accounts	$61,000,000
Indexed equity accounts	$3,112,000,000
Indexed bond accounts	$94,000,000
Balanced	$152,000,000
U.S. tax-exempt clients	380
Minimum separate account	$100,000,000

Wells Fargo Nikko Investment Advisors' international equity assets were committed most heavily to Japan, the United Kingdom, Germany, France and the Netherlands.

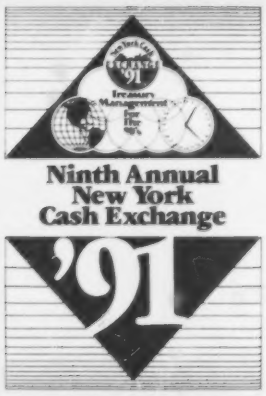
The firm manages a broad range of international passive and progress-driven products, covering 90% of the world's non-U.S. capital markets.

The firm runs $1.702 billion of discretionary tax-exempt assets in currency hedging programs; $1.48 billion of the underlying assets is managed internally.

Patricia Dunn and Donald Luskin are chief investment officers; Michael Henman is client contact.

WorldInvest Ltd.
56 Russell Square, London WC1B 4HP, U.K.; 071-637-3322

Continued on page 33



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Russell

Continued from page 1

amount . . . from the U.S. will come principally from the pension pool," Mr. Russell said.

Mr. Russell didn't release the names of all of the participants. He did say, however, that a majority of the pension funds are clients of The Frank Russell Co.

Money managers were chosen based on how well he thought they could "add value to this discussion," Mr. Russell said.

Collectively, the group represents about $500 billion in assets, said Mr. Russell.

Participants pay a "suggested contribution" to join the group, said Walter Stern, chairman of Capital Group International Inc., who represents Capital Guardian Trust at the organization. Neither he nor Mr. Russell would reveal the amount.

A portion of the contribution helps "subsidize" the Institute for East-West Security Studies, a think-tank based in New York and Czechoslovakia. The Institute is providing the Russell 20-20 with information on Eastern Europe.

Participants praised the Russell 20-20. Mr. Stern, for instance, called it a "great idea."

Said Teri Goodale, investment director of American Telephone and Telegraph Co.'s $34 billion pension fund: "With so many changes going on in Eastern Europe, George Russell has put together a good group that can (tap) sources of information and exchange ideas." David P. Feldman, corporate vice president-investment management, is AT&T's representative to the group.

She said AT&T's fund hasn't yet made any investments in Eastern Europe, but "there could be the possibly of investing" in the future. "I think we're all primarily in a learning mode," she added.

Kenneth E. MacWilliams, president of Prudential Equity Management Associates, said "Mr. Russell is doing a distinct service for (investors) as well as for Eastern Europe" by making officials of that region aware of Americans' investment criteria.

He said Prudential — which has invested only a small amount in Eastern Europe through a country fund — now is doing its homework. He suggested group participants "might begin putting their toe in Eastern Europe" next year. He believes there is "genuine and lasting interest" in Eastern Europe.

Mr. Russell believes group members' investments will take various forms. "I predict there will be some cooperative joint ventures, some investment funds put together and individuals grabbing opportunities. These will happen more on purpose than by accident because the group meets on purpose," he said.

The group's daylong meetings provide a range of instructional programs. The May session, for example, included briefings on four Eastern European countries from the institute and three guest presentations on Eastern European investment opportunities.

No group trip to Eastern Europe is on the agenda. "We think we'll learn by bringing people to the U.S. rather than by traveling," Mr. Russell said. ■

P&I will publish its investment management software directory Sept. 2.

Continued from page 32

Total assets managed	$3,239,000,000
Non-U.S. pension assets	$1,065,000,000
U.S. discretionary tax-exempt assets managed:	
Total	$2,533,000,000
International	$1,189,000,000
Active equity accounts	$210,000,000
Active bond accounts	$965,000,000
Balanced	$14,000,000
Global	$1,344,000,000
Active equity accounts	$209,000,000
Active bond accounts	$1,049,000,000
Balanced	$86,000,000
U.S. tax-exempt clients	46
Minimum separate account	$15,000,000

WorldInvest Ltd.'s international equity assets were committed most heavily to Japan, the United Kingdom, Switzerland, France and Spain. Its global equity assets were committed most heavily to Japan, France, the United Kingdom, Switzerland and Spain.

The firm's active approach is driven by fundamental economic analysis. It is willing to take significant positions away from the index, based on its top-down view of anticipated market returns.

Keith Brown is chief investment officer; Susan Leader is client contact.

We are pleased to announce that

Jean M. Clark

has rejoined the firm as Senior Vice President.

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(213) 556-2496

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AT DEADLINE

TSA put on probation

The Los Angeles County Employees' Retirement Association put TSA Capital Management on probation June 26 following the resignation of five senior vice presidents and amid concerns about the supervision of the firm's computer-based investment models. All five TSA executives left to join MPT Associates.

Improper action charged

George Anderson, formerly a cash manager at EDS, has filed a wrongful discharge suit in Texas District Court against EDS, alleging he was fired for refusing to follow orders involving improper investment practices with corporate and pension assets.

Among his charges, Mr. Anderson contends Douglas Crow, formerly managing director of benefit plan asset management, asked him to falsify interest projections for a pension account, make some investment transactions look bad and approve payment invoices for the fund trustees hadn't approved.

NCM buy-out completed

NCM Capital Management Group Inc. has completed a management-led buy-out with financial help from IDS Advisory Group, according to Maceo Sloan, NCM chief investment officer.

For an undisclosed amount, IDS obtained a 40% stake in the Sloan Financial Group Inc., the new parent of NCM Capital Management.

Mr. Sloan and 12 other senior executives will own the remaining 60%.

Raytheon adopts proposal

Raytheon has agreed to secure

Continued on page 39

INSIDE

TED FUKA

More rain predicted

Many plan sponsors in the private pension system are seeking shelter from the buckets of regulations poured on them, including the Labor Department's intention to toughen enforcement. In Commentary, Page 14.

Politicians grabbing pension assets

Power and budget woes are at issue

By Hillary Durgin

Politicians want to overhaul the structures and funding mechanisms of public pension funds to address record-breaking deficits.

But the initiatives are just as much political maneuvers by elected officials to consolidate power as last-ditch financing strategies, pension fund executives and consultants say.

Politicians counter that current budget shortfalls entitle them to review retirement funding, particularly when some pension funds are accumulating excessive assets.

Solving the shortfalls by reducing or eliminating pension contributions is not new. But the structural changes under consideration raise issues of fiduciary responsibility and benefit security that are likely to transform the way public funds operate.

Using pension assets for purposes other than providing benefits may become acceptable, but pension executives will face increasing difficulties in evaluating whether they meet their investment objectives and still fulfill their fiduciary duties, said Carol W. Proffer, managing director of William M. Mercer Inc., Dallas.

"It's going to change the direction of the use of control of pension funds in the public sector," she said. "The focus of the dollars is going to be broader."

And pension fund trustees might try to stop state politicians from continuing to tap their funds to finance state government.

Already in California and Illinois, lawsuits are being contemplated, and momentum is once again gathering behind some sort of federal legislation to protect public pension assets.

Among the states and municipalities now debating or implementing changes:

- The Texas comptroller has proposed establishing a state pension fund committee composed of the governor, lieutenant governor and comptroller to oversee funding issues now handled by individual state pension fund boards.

The proposal would increase state authority over contribution rates and funding periods, permitting the state to raise $156 million from the state's two largest funds — The Teacher Retirement System of Texas and Employees Retirement System of Texas — over the next two years but potentially jeopardizing benefits for retired teachers. Another measure would allow the state to set retirement systems' budgets.

- The Illinois Legislature is considering proposals to increase early retirement incentives and enrich pension benefits that officials at the $4.3 billion Illinois State Universities Retirement System say the fund cannot afford to pay.

See **Deficits** *on page 39*

3 funds try to block Time Warner issue

By Barry B. Burr

Three public pension funds sued Time Warner Inc. to block its stock rights offering and recover more than $10.1 million in losses they've sustained in the market so far by the fall in the price of their holdings as a result of the proposal.

An attorney for the three funds — the $22 billion Florida State Board of Administration, the $2.2 billion Louisiana State Employees' Retirement System and the $3.5 billion Teachers' Retirement System of Louisiana — said fund officials are willing to negotiate a compromise and support a stock rights offering in a different form by Time Warner.

The funds filed the 26-page complaint in Chancery Court, Dover, Del., against Time Warner and its 25 directors.

The California Public Employees' Retirement System, in a separate move, hired Providence Capital Inc., New York, to evaluate the proposal. I. Walton Bader, partner with Bader & Bader, White Plains, N.Y., and attorney for the three litigating pension funds, said the California fund has been in contact with the other funds and won't decide whether to join the suit until it reviews Providence's findings.

Nevertheless, Mr. Bader predicted, "You're going to get a substantial number of pension funds joining this case. A number have called and asked for copies of the complaint." He declined to name the others.

Providence, meantime, has been soliciting major pension funds to advise them on the Time Warner

See **Suit** *on page 37*

MICHAEL A. MARCOTTE

Teamsters members such as United Parcel Service employees are being forced to think about pension issues such as full funding vs. benefit increases in the campaign to elect a union president. Page 33.

Ego leads to Dennis Walton's downfall

By Joel Chernoff

POMPANO BEACH, Fla. — Six years after winning a landmark court victory boosting union efforts to invest their pension funds in job-creating investments, Dennis Walton's real estate empire is in ruins.

The Department of Labor — which had lost the 1985 court decision and a subsequent appeal — on Feb. 1 forced the brash and outspoken Mr. Walton to step down as chairman of Operating Engineers Local 675's pension and health funds, both of which are nearly insolvent. And, on June 7, a court wrested control of benefit payments away from the remaining trustees after Mr. Walton disregarded the directions of the plan's court-appointed named fiduciary and mailed unreduced benefit checks for June to retirees.

Mr. Walton, a former merchant marine and policeman who turned job-creating pension fund investments into a personal crusade, now is on the defensive. The Labor Department is suing him and the other trustees for investing 95% of the pension fund's assets in local real estate ventures that have soured.

Retiree benefits will have to be cut in half, and the named fiduciary likely will ask the Pension Benefit Guaranty Corp. to take over the plan next year. Meanwhile, Mr. Walton faces a tough election in August as business manager of the union local.

At stake is the legacy Mr. Walton created through his fund's real estate investments and legal precedents. By using his court victory as a moral club, he lambasted the Labor Department and chastised trustees reluctant to commit to real estate. Through speeches that effused charm, wit and bluster, he personally ignited the enthusiasm of dozens of Taft-Hartley plan trustees across the country to put their pension assets to work for their members.

The damage on the South Florida union local's pension and health plans appears to be devastating. Jere Brassell, president of Southern Benefit Administrators Inc., Goodlettsville, Tenn., who became the plans' named fiduciary under a court order, said the pension fund now is worth less than $5 million — and "very possibly" nothing — down from $63.7 million at the end of 1987.

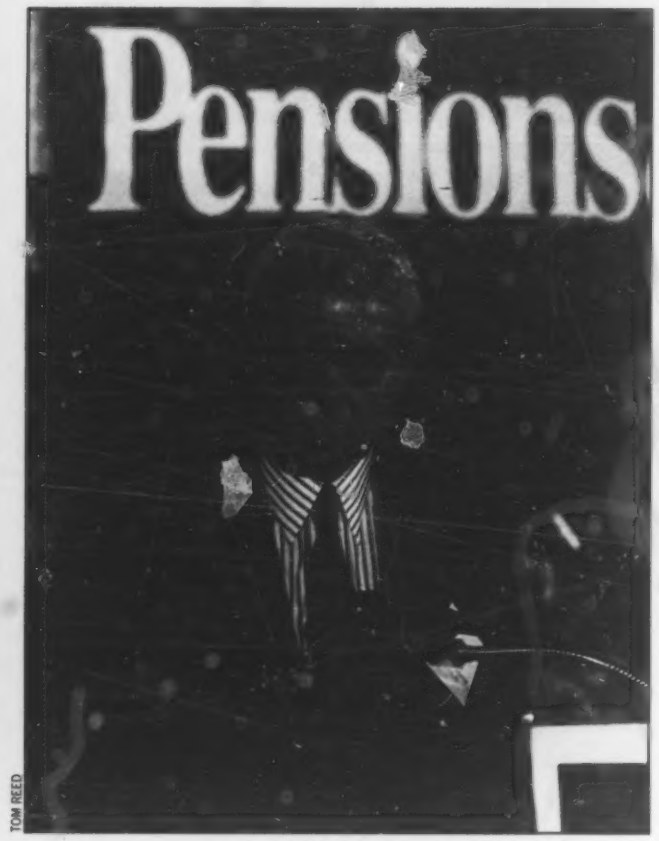
A consultant to the plan for 15 years, Mr. Brassell now is viewed by Mr. Walton as a "direct tool of the Department of Labor."

Nowhere is there a suggestion that Mr. Walton used the pension fund for personal gain. Instead, critics repeatedly cite Mr. Walton's ego as the factor that brought the funds down.

Mr. Walton blames most of the fund's problems on the U.S. government: Congress artificially inflated real estate values by enacting various tax benefits in 1981, only to take them away in 1986; the government's actions forced

See **Union turmoil** *on page 38*

NEWS DIGEST



TOM REED

Edward V. Regan, New York state comptroller and sole trustee of the $43.7 billion State & Local Retirement Systems, spoke at *P&I*'s investment management conference. See page 4.

SPECIAL REPORT: FASTEST GROWING MANAGERS

NCM Capital Management is No. 1 in growth for assets under management, a *P&I* survey shows. Page 17.

FINANCING

Three public pension funds sue Time Warner Inc. to block its stock rights offering. Page 1.

INTERNATIONAL

Batterymarch picks two companies for the first investments for its Soviet Companies Fund. Page 3.

REAL ESTATE

Two pension consulting firms are planning to form a secondary market for commingled real estate funds to help frustrated pension executives. Page 3.

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Software questionnaires in the mail

Questionnaires for *Pensions & Investments'* survey of investment management software were mailed July 1. Portfolio management and asset allocation software as well as database services for use in the investment management of pension portfolios will be covered. Only specialty application software will be included; no generic or utility programs will be profiled. Completed forms must be returned by Aug. 1 to be included in the Sept. 2 special report. If you have not received a questionnaire, or if you have any questions, contact Christine Philip at (312) 649-5217.

9 to leave Wilshire co-op

New group gives consultants larger data base, control

By Curtis Vosti

The Wilshire Associates Cooperative was dealt a savage blow last week when nine of its members — with at least 75%, and some say nearly 90%, of the portfolios in its data base — announced they are leaving by the end of the year

The nine formed a new co-op, called Independent Consultants Cooperative. They have joined forces with Bankers Trust Co., New York, which will provide the back-office numbers-crunching for the performance data base of the consultants' pension fund clients.

Members of the new co-op say they are forming their own organization to access a larger data base, nearly 3,000 portfolios with Bankers Trust (1,500 from the pension clients of the consultants and 1,500 from Bankers Trust's pension clients) as opposed to 2,000 with Wilshire; get better analytic services, especially in the fixed-income and international areas; and exercise more control over the co-op's activities and membership.

Most members say they will continue to contract with Wilshire for other services, such as investment management performance data base and asset allocation services.

"The primary difference is this cooperative, instead of being funded and controlled by (Wilshire), is being controlled and operated by the (consulting) firms," said Michael Shone, president of Peirce Park Group, Wilmington, Del.

Other consulting firms leaving Wilshire to join the new co-op are: Becker, Burke Associates, Chicago; R.V. Kuhns & Associates, Portland, Ore.; New England Pension Consultants Inc., Boston; Jeffrey Slocum & Associates, Edina, Minn.; Wurts, Johnson & Co., Seattle; Highland Associates, Birmingham, Ala.; Asset Consulting Group Inc., St. Louis; and Gerber/Taylor Associates Inc., Memphis.

Madison Portfolio Consultants Inc., New York, will belong to both data bases, according to Alan Weisenberg, president of Madison.

Before the split, the Wilshire co-op reportedly had 26 members representing pension funds with assets of more than $125 billion.

Wilshire officials are disappointed with the planned departures, but contend the exodus will not cripple their operations.

"We still have more people who are remaining than who are going," said Gil Hammer, senior vice president and principal. "The Wilshire Co-op will remain."

Mr. Hammer said Wilshire "has

See **Co-op** *on page 35*

Congress gets three simplification bills

By Fred Williams

WASHINGTON — Following years of tax law changes that have confused pension executives and compounded plan administration, three pension simplification bills have been introduced in Congress — increasing the odds such a bill will be passed this year.

Sponsors of each of the bills — Rep. Rod Chandler, R-Wash.; Rep. Dan Rostenkowski, D-Ill.; and Sens. David Pryor, D-Ark. and Lloyd Bentsen, D-Texas — claim their measures simplify pension administration and make pension plans more accessible to small business.

The simplification measures address most of the same issues, such as non-discrimination rules, distribution and rollover rules, plan availability and definitions of highly compensated employees.

The Bush administration favors pension law simplification and Secretary of Labor Lynn Martin has proposed measures similar to some of the congressional efforts as part of her portability recommendation.

Highlights of the proposals:

- Each would expand the availability of salary reduction simplified employee pension plans to employers with up to 100 employees (from up to 25 now).
- Each would repeal the five-year averaging rules that provide favorable tax treatment to lump-sum distributions. They differ, however, over the issue of net unrealized appreciation rules regarding employer securities.
- The Chandler and Pryor/Bentsen bills would remove non-discrimination testing for plans that fit within certain "safe harbor" provisions while the Rostenkowski bill would retain testing but expand the area within which an employer's plan would be considered non-discriminatory. The Rostenkowski bill would allow companies to use data regarding highly paid employees from the preceding year. In order to be non-discriminatory, plans would have to show the actual deferral percentage of highly compensated employees for the plan year does not exceed 200% of the average deferral percentage of non-highly paid employees from the preceding year.
- The measures would define more clearly highly compensated employees.
- In what some benefits specialists consider a sleeper issue, the Rostenkowski bill would change the normal retirement age to coincide with the rise in Social Security retirement age to 67 for employees born after 1953 from the current retirement age of 65.

The rise in retirement age would help employers coordinate retirement plans with Social Security, said Larry Sher, partner with Kwasha Lipton, Fort Lee, N.J. Current Internal Revenue Service rules will not allow the use of normal retirement age after 65, he said, restricting how plans are designed in order to satisfy non-discrimination and Social Security integration rules.

"It will be really useful to some

See **Congress** *on page 34*

TOM REED

Rep. Rod Chandler is one sponsor of a pension simplification bill.

Charles Wurtzebach will direct investment research for JMB Institutional.

JMB nabs Pru exec, shifts staff

By Steve Hemmerick

JMB Institutional Realty Corp., Chicago, has hired MPT expert Charles H. Wurtzebach from Prudential Realty Group and folded a JMB affiliate's 30-person research staff into JMB Institutional.

The changes will give JMB executives greater ability to advise clients on real estate investments at a time when many pension executives and trustees are criticizing their real estate advisers for acting more like brokers than advisers. JMB has invested in more than $10 billion of real estate for tax-exempt clients.

Jerome J. Claeys III, chairman of JMB Institutional Realty, said the beefed-up research effort will allow JMB to provide advice not solely for a single transaction but consistent with the goals of a client's overall portfolio.

"This reorganization and expansion will add depth and further enhance our research and portfolio management capabilities. We will be able to provide far more tailored and in-depth advisory services for our clients," Mr.

See **JMB** *on page 36*

INSURERS

Bad mortgages riding the crest of poor realty market

■ The sluggish real estate market has caused a 70% surge in non-performing residential and commercial mortgages held by insurance companies, a recent survey reports.

Weiss Research Inc., West Palm Beach, Fla., reports that its survey of 1,180 insurance companies, representing 93% of the industry's total assets, revealed that non-performing mortgages — those that are 90 days past due, in the process of being foreclosed process or foreclosed during the year — jumped to $11.4 billion at the beginning of 1991, compared with $6.7 billion a year earlier.

The survey report notes that 13 life and health insurers with $2 billion or more in assets have a ratio of 45% or more of non-performing assets to capital and surplus. Trailing the pack is the life insurance unit of Travelers Insurance Co., Hartford, Conn., with a 95.5% ratio.

"The surge in non-performing mortgages is due to a real-world increase in default rate, unlike the sudden increase in reported junk-bond holdings, which was due primarily to a change in the (National Association of Insurance Commissioners') reporting procedures," said Martin D. Weiss, president.

"Although the total dollars currently in non-performing mortgages are less than the amount in junk bonds, other borderline mortgages could default if the economy remains weak," Mr. Weiss said.

Insurers' woes grow

Non-performing mortgages are an escalating problem for many insurance companies. The insurers listed have more than $2 billion in admitted assets and a ratio of 45% or more of non-performing assets to capital and surplus.

Travelers (Conn.) —	53.8%	95.5%
UNUM Life (Maine)	13.3	56.6
Equitable Life (N.Y.)	40.7	55.4
Phoenix Mutual (Conn.)	37.8	54.6
TIAA (N.Y.)	41.9	50.0
Mutual Life/New York (N.Y.)	35.4	47.9
State Mutual Life (Mass.)	25.8	46.0

REAL ESTATE

Trophy investments ahead of pack

■ Trophy and core real estate investments are both considered conservative investments for pension funds, but trophy investments sharply outperformed core property investments during the 12 months ended March 31.

According to SEI Capital Resources, Wayne, Pa., trophy properties returned 1%, while core investments returned −1.3%.

Investors choosing trophy-style real estate would buy existing, well-leased commercial property, including downtown office buildings and regional malls. Core-style investing would seek well-leased commercial suburban office buildings, neighborhood or community shopping centers and warehouses.

Opportunity-style real estate investment, meanwhile, outperformed both trophy and core, returning 1.4% for the year.

Opportunity properties would be highly leveraged or have high vacancies and, therefore, higher risk.

MARY HERLIHY

Trophy real estate did much better than core holdings for the year ended March 31.

INVESTING

Drug, computer stocks top picks

■ Institutional investors most heavily purchased drug stocks and sold broadcast media stocks in the first quarter, according to Spectrum, CDA Investment Technologies' report on institutional activity.

The institutions were net purchasers of $2.3 billion of drug stocks, and net sellers of $1.2 billion of broadcast media equities.

Other favorite purchases were computer systems ($1.9 billion) and computer software ($1.7 billion). Other least-favored industries were electric power (net sales of $472.7 million) and oil well equipment and services (net sales of $374.6 million).

The most purchased stock was **IBM Corp.** at $1.1 billion, followed by $1.04 billion of **Pfizer Inc.** and $871 million of **MBNA Corp.**

The heaviest net sales were **CBS Inc.**, net sales of $1.4 billion; **Schering-Plough Corp.**, $473 million; and **GTE Corp.**, $467 million.

PEOPLE

Melamed wins human rights award

■ Leo Melamed sees the futures markets as a bastion of equal opportunity — so it's logical that he has spent much time and energy promoting such fairness in other aspects of society.

For this work, Mr. Melamed, chairman emeritus of the Chicago Mercantile Exchange, has been named 1991's recipient of the American Jewish Committee's Human Rights Medallion. The award was presented June 17, at a dinner with Sen. Daniel Inouye as principal speaker.

"It's a great honor, of course," Mr. Melamed said. "The American Jewish Committee has been in the forefront of human rights in this country for more than 80 years." The committee runs numerous programs aimed at fostering greater understanding among various religious, racial and ethnic groups.

In addition to his long-time position as a leader of the Mercantile Exchange, Mr. Melamed has found time to promote Jewish cultural affairs. He has participated in Yiddish theater and has recited Yiddish poetry for a variety of Chicago audiences.

Mr. Melamed — who fled Nazi-occupied Poland for the U.S. with his parents in 1941 — sees a link between his work in the futures markets and his work for human rights.

"Markets themselves have no ethnic, religious or gender biases; they reward on merit," he said. In that, he said, they can be a model for the rest of society.

MICHAEL A. MARCOTTE

Leo Melamed is the 1991 recipient of the American Jewish Committee's Human Rights Medallion.

INTERNATIONAL

Canadian fund foreign holdings beat '90 market

■ International holdings of Canadian pension funds outperformed the market in 1990, according to The World Markets Co., New York.

Canadian funds' international portfolios had a weighted average return of −10.6% for the year, compared with −22.8% for the Morgan Stanley Capital International Europe Australia Far East Index.

Low exposure to Japan helped the funds' performance, especially in the first and third quarters. High weightings in German equities also were beneficial, as was a relatively high level of liquid assets. Stock selection within markets helped the funds beat the local indexes in most countries, with the most pronounced outperformance in Japan, Germany and Sweden.

World Markets' comparative analysis of Canadian investors' international portfolios is part of its new IMPACT Canada service. The service has begun with a universe of 13 EAFE-mandate portfolios with assets of more than $860 million.

The company plans to add global and world-minus-Canada portfolios when enough are available.

Quarter-by-quarter performance in 1990 was: first quarter, Canada EAFE universe −5.9%, EAFE index −18.8%; second quarter, 9.4%, 9.1%; third quarter, −18.8%, −21.7%; fourth quarter, 7%, 11.2%.

Canadian pension funds can invest up to 10% of their assets internationally; under recently proposed legislation, the limit would be increased to 20% within five years.

VENTURE CAPITAL

Schroder closes U.K. partnership

■ Schroder Ventures Inc., New York, has closed the third and final partnership of its Schroder UK Venture Fund, bringing the funds' total assets to $133 million.

More than 50% of the assets committed to all three partnerships came from U.S. investors, including corporate and public pension funds and endowments, with the balance from U.K. and Dutch institutions and high-net-worth individuals. Officials declined to name investors.

In addition to the U.K. fund, the firm so far has raised $35 million of a targeted $50 million for a Spanish buy-out fund. It also has begun marketing a second buy-out fund for Canada called Schroder Canadian Buy-Out Fund II. The first fund closed in 1987.

INTERNATIONAL

Mexican pension funds place No. 1 in Wyatt survey

■ For the second year in a row, Mexico's pension funds and seniority plans outperformed 11 other countries' funds, according to a report by The Wyatt Co.

Last year, in local currency terms, Mexico's 104 funds included in the survey — with aggregate assets of $791 million — posted a 44.8% median return. That compared with a 64% return for 1989 by 97 funds representing $361 million. The 104 funds in the 1990 survey represented about 20% of total Mexican pension funds and seniority plan assets, which are lump sum payments made to employees with at least 10 years of service after they leave their jobs.

The Philippines' pension funds ranked second in the Wyatt study. For 1990, 150 retirement funds, with about $156 million in aggregate assets, posted a 12.5% gain.

U.K. funds brought up the rear with a −12.6% return for balanced funds. In the United Kingdom, Wyatt surveys 450 pooled funds that represent "substantially all of the funds available to tax-exempt institutional investors in the U.K.," the report said.

Other countries' funds posted generally mediocre to down results last year. Japanese trust banks, for the year ended March 31, 1990, posted a 0.5% gain. The report, "Global Perspective," said the majority of retirement fund assets in Japan are managed by 17 trust banks and 21 life insurers.

In Australia, balanced accounts of 37 pooled funds surveyed, with aggregate assets of $10 billion (U.S.), gained 0.4% in 1990.

In Canada, 253 balanced pooled accounts showed a median 0.4% decline, while in New Zealand, the median return for 107 retirement funds — with total assets of about $2.4 billion U.S. — was −2%.

The pension funds of Mexico, land of the Mayan ruins at Chichen Itza, outperformed funds of 11 other countries.

SOCIAL CRITERIA

Maquiladora guidelines proposed

■ Along with South Africa and Northern Ireland, a set of social investing guidelines has been unveiled governing corporate work practices in Mexico.

The guidelines, The Maquiladora Standards of Performance, will be submitted to corporations informally and through shareholder proposals.

The new code is compiled by The Interfaith Center on Corporate Responsibility and religious, labor, Latino and women's organizations.

The guidelines are aimed at companies that operate subsidiaries, have affiliates or conduct operations directly in Mexico.

"The goal is to promote work practices that protect the environment, create a safe work environment and provide an adequate standard of living for 'maquiladora,' (literally, sewing machine) employees," according to Institutional Shareholder Services Inc., Washington.

This year, shareholder proposals concerning Mexican operations were filed at 12 companies, according to the ISS. Ten were withdrawn after management agreed to either report on its operations or allow inspection of facilities by coalition members.

REAL ESTATE

Income boosts apartment returns

■ Investments in apartments for pension funds and other tax-exempt investors outperformed investments in other major property types for the first quarter of 1991.

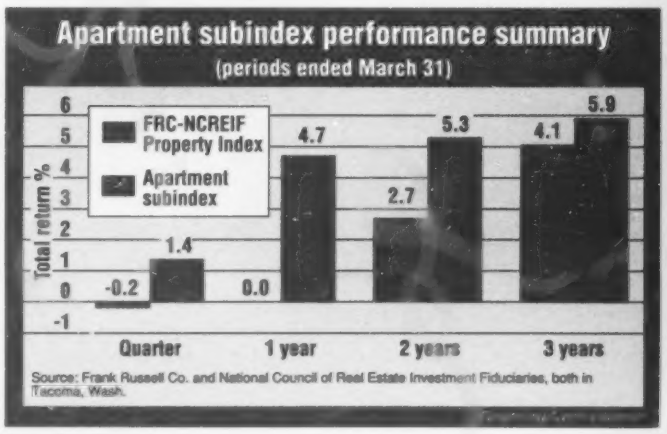
Apartments scored a first-quarter total return of 1.4% in the Russell-NCREIF Property Index. The index, which tracks the performance of 1,506 properties with a total tax-exempt investment of $22.2 billion, reported the total return for all property types for the quarter was −0.2%.

Total returns for individual property types in the index for the first quarter were: office, −0.9%; retail, 0.6%; research and development/office, −1.8%; and warehouse, 0.5%.

The higher return for apartments came all from income because, as a category, apartments actually fell in value by 0.4% in the first quarter.

Some of the reasons for past and probably future strong returns from apartments include the curtailment of apartment building with federal tax law revisions, the aging of residential housing stock, increased formation of households and high single-family home prices and interest rates, according to Lewis Heuberg, vice president with MIG Cos., a West Palm Beach, Fla., real estate firm.

For the year ended March 31, apartments had a total return of 4.7%, while the overall index for the year was flat at zero. It is the third quarter in a row apartments led all other property types.



PEOPLE

Firm aims for global fixed income

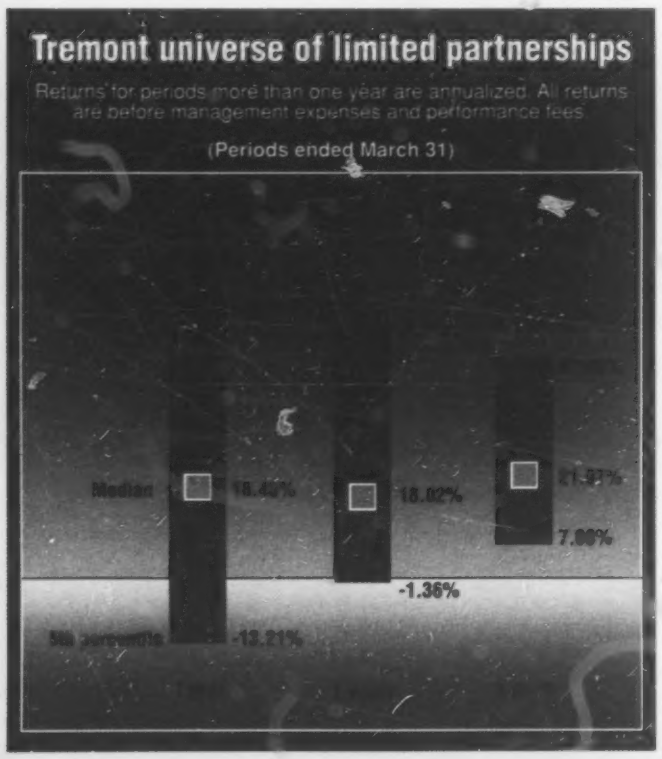
■ William L. Nemerever, formerly executive vice president in Fidelity Management Trust Co.'s fixed-income group, plans to take Boston International Advisors Inc. into the world of global fixed income.

He joined Boston International May 20 as managing director. A six-year Fidelity Trust veteran, he said he wanted to go beyond domestic strategies to global and to work with an entrepreneurial firm where he could be an owner and manager.

At Boston International, which to date has managed international equities exclusively, he will rejoin Lyle Davis, with whom he worked at State Street Bank & Trust Co. before Fidelity Trust.

Mr. Davis was senior vice president and chief investment officer at State Street before starting Boston International, where he is president and managing director, in 1986.

Mr. Nemerever was vice president and head of fixed income at State Street.



INVESTING

Fannie Mae offers Japanese Pooltalk

■ As Japanese investors increasingly warm to U.S. mortgage-backed securities, the Federal National Mortgage Association, Washington, is trying to turn up the heat further.

Fannie Mae is offering a Japanese version of Pooltalk, a telephone service in which investors can call 24 hours a day for trading information on Fannie Mae mortgage-backed securities.

Last year, Japan's purchases of U.S. mortgage-backed securities quadrupled to about $25 billion, of which about $15 billion was in Fannie Maes, according to officials.

FINANCING

Mezzanine fund seeks investors

■ Hicks, Muse & Co., a New York investment bank, is in the early stages of raising a mezzanine fund targeted at pension funds and life insurance companies, according to Charles Tate, managing director and partner.

Mezzanine capital is scarcer than ever with the credit crunch and the demise of the junk bond market, increasing returns to mezzanine lenders.

"The yields on mezzanine assets if a transaction works are in the low to mid-20s. They're fairly illiquid, somewhat long-lived investments," he said.

The fund would be positioned to take advantage of what Mr. Tate predicts will be an increase in leveraged buy-out activity.

With real estate's dismal returns and the contraction of the junk bond market, the mezzanine fund would represent one of few high-yielding investments in an environment of relatively stable interest rates, he added.

WASHINGTON

PBGC puts new players in lineup

■ The Pension Benefit Guaranty Corp. has restructured its front office to more closely resemble that of a private company.

The newest addition to the team is James L. Wolbarsht, who has joined the PBGC as its chief financial officer and one of three deputy executive directors.

Mr. Wolbarsht most recently was president of DEFCON Inc., a market research firm based in Arlington, Va. He also has consulted for various government agencies and has served as staff director for the President's Commission on Industrial Competitiveness between 1983 and 1985.

At the PBGC, Mr. Wolbarsht will be responsible for financial policy and budget operations, investment management, premium operations, procurement and information resources management. One of his major tasks will be to direct the development of an integrated accounting and financial management system.

PBGC veteran William M. DeHarde was named deputy executive director and chief operating officer for the agency. He will have responsibility for the agency's daily operations. He oversees and directs the agency's insurance operations, human resources, management planning and support services.

Previously, Mr. DeHarde was director of the PBGC's insurance operations department for 1[illegible] years.

More regulations bring more cost, less rule

By David Langer

TED FUKA

Legislation the Department of Labor is expected to re-propose later this year to toughen enforcement of private pension plans undoubtedly will again leave out a noteworthy offender. The three main sections of the proposal target private sponsors by calling for strengthening plan audits, incentives for private enforcement and disincentives for unlawful behavior. But what of the abuses of the government itself? The evidence of its acts harmful to pensions is powerful, and it ought to be the primary target.

No one, of course, questions that fraud and fiduciary breach occur among a number of the some 800,000 qualified pension plans. How could it be otherwise with a couple of trillion dollars scattered among so many plans? There are participants and beneficiaries who are being deprived of their rightful benefits, and there are corrupt fiduciaries who leave plan participants painfully shortchanged, as recent congressional testimony vividly described.

Should further action be taken to punish and to try to prevent such violations? Absolutely, but it should be carefully aimed at problem areas and avoid casting a sweeping net that would embroil sponsors in yet another round of law and regulation that will, if the past is a guide, fall with a heavy hand on all plans regardless of likelihood of culpability. Recognition is needed beforehand that plans covering most participants are being run in a decent, law-abiding manner.

But the Labor Department and the House Ways and Means Committee's Subcommittee on Oversight have focused only on causes of financial injuries to participants of a limited number of individual plans. They fail to see the problems caused by the colossal failures of the executive and legislative branches that adversely affect all 800,000 plans and their participants and are driving away or otherwise discouraging plan sponsorship. Such problems include:

- The rapidly escalating and mind-boggling complexity of pension laws and regulations issued since the Tax Equity and Fiscal Responsibility Act of 1982.
- The out-of-control budget deficit, which has caused the government to invade the private pension system for funds by cutting back on permissible defined benefit plan contribution levels (thereby impairing plan solvency) and by adding a host of annoying excise taxes.
- The Pension Benefit Guaranty Corp.'s shaky actuarial foundation, creating a worrisome tontine in reverse, where premiums instead of benefits have been rising rapidly for the surviving defined benefit plan sponsors.

It is fair to conclude that the unsound management of government creates far more extensive damage to pension expectations than the isolated instances of illegal behavior of individual fiduciaries. It certainly does not matter to a retired person that the loss of reduction of a pension came about because of plan fiduciaries' abuses or by mismanagement and corruption at the government level.

The Labor Department would do well to take a close look at the behavior of its brethren-in-government before heaping another truckload of laws and regulations on plan sponsors, thereby motivating more to shun plans. It also could promote the concept that members of the executive and legislative branches need to observe the same fiduciary standards pension plan fiduciaries are required to obey.

Any new enforcement rules the Labor Department still feels are needed to curb errant plan fiduciaries should be designed to provide injured participants and beneficiaries access to remedies with a minimum of additional burden and cost for both sponsors and government. ■

David Langer is a consulting actuary and the president of David Langer Co. Inc., New York.

LETTERS TO THE EDITOR

Not a small-stock index

■ In his May 27 commentary on small stocks, Kenneth L. Fisher makes a very good point that the Nasdaq Composite Index is a measure of performance of all Nasdaq stocks; and it includes many growth stocks that are not small. But some of the evidence he uses to support his case needs to be corrected.

The 10 largest Nasdaq stocks account for 15% (not 22%) of the index and the 50 largest Nasdaq stocks account for 33% (not 50%) of the index. All of these have more than $1 billion in market value.

If you value ADRs by ADR shares outstanding, rather than market value of the underlying company, none of the four largest Nasdaq companies are Japanese ADRs as stated in the article. More than 800 Nasdaq stocks are larger than the ADRs outstanding for Tokio Marine & Fire Insurance, Nasdaq's biggest Japanese ADR.

Nevertheless, Mr. Fisher's point, that it is a mistake to use the Nasdaq composite as a small-cap measure, is a good one and needed to be made.

Gene L. Finn
Vice president and chief economist
National Association of Securities Dealers
Washington

Social investing risk/return

■ Jeffrey Teper's article on the risk/reward relationship in socially responsible investing ("The cost of social criteria," May 13) asserts the Domini Social Index "had a risk-adjusted cost of 1.1%." Mr. Teper does not indicate which risk-adjustment method he used, but I assume he means the DSI's annual rate of return, relative to its beta, was lower than the S&P 500's. This differs from our experience.

We calculated risk-adjusted returns for the DSI using the two most commonly applied methods: the Sharpe and Treynor scores. Our analysis, based on monthly return and risk-free rates provided by State Street Bank, shows the DSI beat the S&P 500 on a risk-adjusted basis for the Dec. 1, 1985-April 30, 1991, period.

The geometric mean monthly return was 1.217% for DSI, 1.135% for S&P 500, and 0.6% for T-bills. The standard deviation of monthly returns was 5.64% for DSI, 5.26% for S&P 500, and 0.1% for T-bills. Beta (monthly returns) was 1.06% for DSI and 1% for the S&P 500.

The Sharpe score was 0.11 and for the DSI and 0.1 for the S&P 500. The Treynor scores were 0.58 and 0.53, respectively.

The discrepancy between Mr. Teper's and our findings is partly attributable to the different periods studied. Mr. Teper's study used data only up to September 1990. This underscores the importance of waiting a full market cycle before assessing the risk/reward relation of an investment approach.

Socially responsible investing, like any investment approach, entails risk. Are socially responsible investors compensated for the risks they accept? In the case of the DSI, we believe they are.

Lloyd Kurtz
Senior research analyst
Kinder, Lydenberg, Domini & Co. Inc.
Cambridge, Mass.

Responsible investing

■ Mr. Teper in his May 13 article makes excellent points when he suggests that responsible investors should be concerned about return, security risk, diversification and cost. Indeed, it's good advice for all investors. He's off base, however, when he asserts that responsible portfolios measure poorly in these categories. Specifically:

- Returns — Mr. Teper measured returns through the third quarter of 1990 and concluded measures like the Domini Social Index underperformed the S&P 500 by 110 basis points a year. Extending his analysis through the first quarter shows that DSI beat the S&P 500 by 40 basis points a year. There is no conclusive evidence either way.
- Security Risk — The implication that responsible portfolios replace large companies with "smaller, more volatile companies" breaks down on two counts. First, responsible investing does not necessarily require investing in smaller companies (the Covenant universe is the 1,000 largest U.S. companies). Second, responsible companies are actually less volatile, because their earnings streams are less subject to the vagaries of litigation, regulatory action, labor strife, product liability, etc.
- Diversification — Here the implication is that responsible portfolios are less diversified. They can be. But proper diversification is the job of the investment manager in conjunction with the client. The Covenant data base shows it is possible to style sector-weighted responsible portfolios consistent with diversification needs.
- Transaction Cost — The article refers to the one-time cost of establishing the responsible portfolio. This is the case with any change in investment style. There is clear evidence that indicates that once established, responsible portfolios have lower turnover (lower transaction cost) than other actively managed portfolios.

As in other investment techniques like value investing, technical investing, market timing and contrarian investing, portfolio performance will vary. Just as with the other techniques, the key decision the investor must make is the selection of the proper investment adviser. Investor and adviser then work together to style a responsible portfolio with the proper return, risk, diversification and cost attributes.

Anthony J. Carfang
President
Covenant Investment Management
Chicago

CFO not so highly paid

■ The table accompanying your May 13 article on 1990 chief financial officer's salaries has an error regarding Grumman Corp's CFO, Robert G. Freese.

Our 1991 proxy statement shows Mr. Freese's total cash compensation in 1990 was $301,400 and not the $497,663 listed in *Pensions & Investments*.

P&I mistakenly identified Mr. Freese's "estimated annual pension" ($196,263) as a bonus. While I doubt if Mr. Freese would reject your generous bonus, I think he'd like his pension: His retirement plans were announced in February.

Miriam L. Reid
Director-investor relations
Grumman Corp.
Bethpage, N.Y.

Leave the 'G' in GICs

■ I was a little surprised by your June 10 column on guaranteed investment contracts. Your emotional plea to take the "G" word out of GIC shows a total disregard for the following:

- Most sponsors and participants are well aware of the risks of GIC investing. They pay attention to ratings, size and general comfort with carriers prior to purchase.
- Most GICs in participant directed plans are benefit responsive, paying all liquidity provided by the plan at book value.
- The Federal Deposit Insurance Corp. is nearly broke, and the new bank bill suggests dropping FDIC coverage from bank investment contracts, yet you advise readers that a GIC without the "G" word is more comparable to a BIC, and that BICs have FDIC? Have you checked on the BIC business lately?

Book value liquidity and book value accounting have more to do with the perception of GICs than the "G" word. Take the "G" away and you'll still have the perception! What is your real gripe anyway?

I suggest that GICs will be around for a long time. Your should wake up to the issues and see just what the insurance companies are now calling their government-backed separate accounts.

Mark A. Clouse
Clouse & Co. Inc.
Gastonia, N.C.

NCM Capital leads pack

Assets skyrocket more than 10,000% in 5 year-period

By Christine Philip

NCM Capital Management Group Inc., Durham, N.C., is the nation's fastest growing money manager, a *Pensions & Investments* study shows.

NCM's tax-exempt assets skyrocketed more than 10,000% during the five years ended Jan. 1, to $761 million from $7 million in 1987.

Maceo K. Sloan, chief investment officer of NCM, attributed his firm's growth to its well-planned structure, solid capitalization, state-of-the-art computer back-up and his staff's hands-on investment experience.

As a minority money manager, Mr. Sloan said, he is "delighted to see that minority investment professionals are getting a chance to compete on an almost-even playing field. I anticipate future significant growth for minority managers, as long as they are given the opportunity to show the type of job they can do."

NCM Capital, currently owned by North Carolina Mutual Life Insurance Co., is being bought out by a management group led by Mr. Sloan.

An active value equity manager, the firm screens medium-capitalized stocks for low price-earnings ratios, positive earnings momentum, positive earnings surprise and quality. The firm is equally balanced between equity and fixed-income investments for clients, he said.

Mr. Sloan said he believes NCM can manage the growth while retaining its "strong commitment to client servicing, a very high level of service." A significant portion of the growth is due to additional allocations from existing clients, he said.

See **Growth** *on page 18*

Fastest growing money managers of U.S. institutional tax-exempt assets

$1 billion to $5 billion under management	$ millions Jan. 1, 1991	Jan. 1, 1987	Increase
First Quadrant	1,398	65	2,050.77%
First Interstate/Wash.	3,400	546	522.71
Dean Investment Associates	2,611	439	494.76
Eagle Asset Mgmt.	2,510	451	456.54
WEDGE Capital	1,060	210	404.76

$500 million to $1 billion under management	$ millions Jan. 1, 1991	Jan. 1, 1987	Increase
NCM Capital Mgmt.	761	7	10,771.43%
Morgan Stanley/Chicago Group	876	101	767.33
Franklin Asset Mgmt. Systems	650	110	490.91
Abbott Capital Mgmt.	954	215	343.72
PMRealty Advisors	528	136	288.24

Fastest growing money managers of U.S. institutional tax-exempt assets

More than $10 billion under management	$ millions Jan. 1, 1991	Jan. 1, 1987	Increase
Equitable Real Estate	18,586	5,805	220.17
Lincoln Capital Mgmt.	16,484	5,996	174.92
Fidelity Investments	21,249	8,000	165.61
State Street Bank	57,606	23,572	144.38
Security Pacific Investment	10,634	4,611	130.62

$5 billion to $10 billion under management	$ millions Jan. 1, 1991	Jan. 1, 1987	Increase
Rosenberg Institutional Equity	5,513	1,037	431.63
Manufacturers Nat'l/Detroit	7,232	1,649	338.57
Morley Capital	5,233	1,300	302.54
Hartford Life	6,300	2,283	175.95
Western Asset Mgmt.	6,446	2,729	136.20

*Excludes assets assigned to other firms

Marlborough
Capital Advisors, Inc.®

is pleased to announce
the formation of

THE MARLBOROUGH CAPITAL INVESTMENT FUND

a limited partnership with
committed capital of
$70,000,000
formed to provide mezzanine financing
with equity participations
for established middle-market companies

General Partners

MARGARET L. LANOIX
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May 20, 1991

Some Plain Talk About Defined Contribution Plans

RESPONSIBILITY

Selecting a provider for your company's 401(k) plan is a complex undertaking with far-reaching and long-lasting consequences. You bear a great responsibility to choose well. So when you select a company, or review your present providers, you will want to focus on the factors that really matter–the fundamental issues.

Employees Your first responsibility is to your company's employees because it's their financial security which is at stake. Since participants make their own investment decisions, you must ensure that all–the experienced and the novice alike–are provided with adequate education about the fundamentals of long-term investing. Employees should also be given convenient and timely access to information and the ability to change their investment line-up easily and quickly when necessary.

Your responsibility doesn't end when employees' initial selections have been made. Adequate information must also be provided as they transition through an employment career and on into retirement. The company you select should always be there for them.

Performance Of course, you want good performance. But in addition, your larger responsibility is to provide a broad, well-defined selection of investment options which provide dependable results over the long term. Your investment options–from conservative to aggressive–should be managed for specific objectives with each following a tightly prescribed and understandable investment strategy.

Partnership You strive for excellence in your own company. You should expect no less a commitment from a partner. Your administrative partner should have a deep line-up of well-trained people who will be ready to serve your needs, not only in the basics of timeliness and accuracy, but in responding to special requests. Your company is continually changing. Your partner should be flexible enough to grow and change with you.

Value You are willing to pay for quality, which does not mean excessive fees, but fair remuneration for value received. There should be no hidden assessments, no charges later on when you discover that your contract fees cover only minimum service levels. You should require full disclosure. And the same recognition of value should be present in the costs incurred by your participants for investment management and fund administration.

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CHEAPNESS + IMPROVING FUNDAMENTALS = ATTRACTIVE STOCKS

Maceo K. Sloan says NCM can manage growth while keeping its commitment to clients.

Growth

Continued from page 17

NCM began with one client — Transit Management of Southeast Louisiana Retirement Income Plan, New Orleans — and now has 39.

The transit management fund hired NCM in 1987 for a $7 million balanced account, which has grown to $10 million. Mark Major, chairman of the board of trustees, said the board "knew that NCM would grow by leaps and bounds, but also felt that they could continue to provide good performance and strong client support."

He said NCM "has kept its pledge to remain an active manager, despite its growth in size . . . It is a firm to be reckoned with."

P&I's rankings of the fastest-growing money managers were derived from a comparison of managers' tax-exempt assets reported to *P&I* as of Jan. 1, 1987, with what they reported as of Jan. 1, 1991.

Managers were ranked according to the percentage change in assets in four size categories: those managing more than $10 billion as of Jan. 1, 1991; firms managing between $5 billion and $10 billion; firms managing between $1 billion and $5 billion, and those managing between $500 million and $1 billion.

(Assets of firms acquired or merged during the period were combined for purposes of comparison. If an internal investment management unit was spun off and majority ownership has been maintained by the parent company, the division's 1987 assets were broken out from the parent company's. Manager-of-manager assets were excluded.

(Chancellor Capital Management, New York, and PanAgora Asset Management, Boston, have experienced rapid growth in recent years since becoming independent from their parent companies. They, however, are among the firms not included because they weren't in existence in 1987.)

JMB Institutional Realty Corp., Chicago, was the fastest-growing manager among those with more than $10 billion under management.

JMB's tax-exempt assets climbed more than 534%, to $10.146 billion in 1991 from $1.6 billion in 1987. Second was Equitable Real Estate Investment Management Inc., New York, with a 220.2% increase; Equitable Capital Management Corp., New York, 206.8%; and Lincoln Capital Management, Chicago, 174.9%.

Jerome J. Claeys III, chairman of JMB Institutional, said one of the most important reasons for the firm's fast growth was the development of a strategy that buys corporations rich in real estate assets, or buys pools of real estate assets. Its most notable deal was the purchase of Cadillac Fairview Corp. Ltd. for which approximately $2 billion was raised.

"We would not look as good in the growth rankings if it weren't for our corporate investment strategy. We would have grown without this strategy, certainly, but not nearly as well," Mr. Claeys said.

For at least one firm — Lincoln Capital Management — the bulk of the growth is due to a new product. Lorraine Holland, assistant vice president, said Lincoln Capital experienced a "very successful introduction of our enhanced fixed-income index fund management product." That

See **Growth** *on page 20*

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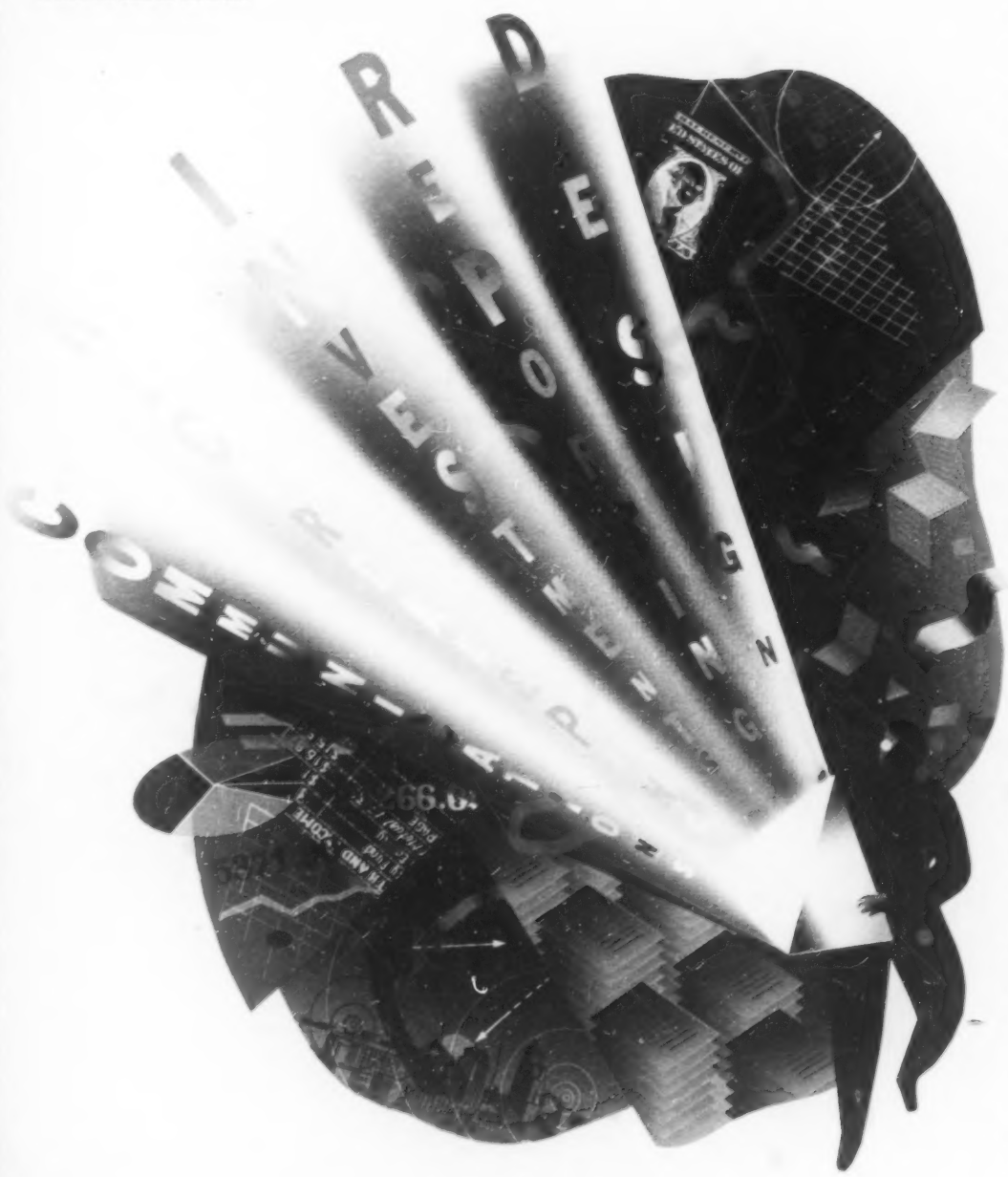

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Growth

Continued from page 18

strategy had one, $600 million account in 1987, and grew to 15 clients with $6.1 billion as of Jan. 1.

Among managers with more than $5 billion but less than $10 billion, SunBank Capital Management, Orlando, Fla., led the ranking, with an increase of 522.7%. SunBank's tax-exempt assets climbed to $6.85 billion as of Jan. 1, from $1.1 billion five years earlier. Rosenberg Institutional Equity Management, Orinda, Calif., was second, with an increase of 431.6%, and The Vanguard Group Inc., Valley Forge, Pa., was third, with a increase of 412.3% for its internally managed tax-exempt assets.

Tony Gray, president of SunBank, said its "No. 1 record of performance over the past 10 years" accounts for the growth. The firm, primarily a big-cap equity manager, closed its doors to new clients in 1989.

Rosenberg's Marlis Fritz, director of marketing and general partner, said her firm has benefited from a growing interest in "a systematic, disciplined decision-making process." The firm uses a computer-driven series of proprietary valuation models to analyze fundamental data.

First Quadrant Corp., Morristown, N.J., as first in the next size category, showing an increase of more than 3,000% — to $1.398 billion from $65 million.

Second was Morgan Grenfell Capital Management Inc., New York, with a 772.1% increase, followed by First Interstate Bank of Washington, Seattle, 522.7%.

John Dorian, managing director of First Quadrant, attributed the growth to "what we consider a leading edge product" in the firm's domestic and global tactical asset allocation quantitative models. Rob Arnott, chief investment officer, is "the leading designer of asset allocation models," Mr. Dorian said, and the firm is a "pure quant shop."

"Our greatest growth over the past four years has been in domestic tactical asset allocation," he said. He added First Quadrant has seen global tactical asset allocation increase during the past year.

NCM led the pack of managers with up to $1 billion, followed by Schroder Real Estate Associates, New York with an increase of 900%, and Morgan Stanley Asset Management/The Chicago Group, Chicago, 767.3%.

(Some firms underwent significant reorganization during the five-year period and were unable to provide figures for comparison. They include Mitchell Hutchins, New York; Manufacturers Hanover Trust Co. — Investment Management Group, New York; C&S/Sovran Trust Co., Atlanta; and Shearson Lehman Advisors, New York.)

The top 10 managers in each category represent a cross-section of asset classes and investment styles. Three insurance company subsidiaries and three banks dominate the list of those with more than $10 billion, while independent firms show up in the smaller asset categories.

Unlike NCM, some of the leaders in asset growth have closed their doors to new business. Two are small-cap equity managers — Morgan Grenfell Capital Management and Ariel Capital Management Inc. SunBank Capital also is closed to new large-cap equity investments.

Morgan Grenfell, for example, stopped accepting new small-cap equity business in the first quarter of 1989, said Jeremy Lodwick, director.

Ariel Capital Management Inc., Chicago, will take a new client only if an existing one leaves. Ariel was ranked fourth on the list of those with more than $500 million under management. "It has been hard, very hard to turn away a lot of new business," said John Rogers, Ariel's president.

The impact of indexed assets appears in the ranking by overall dollar growth. Mike Beasley, senior vice president in the Atlanta office Callan Associates Inc., said, "The top three (Bankers Trust Co., New York; State Street Bank and Trust Co., Boston; and Wells Fargo Nikko Investment Advisors, San Francisco) experienced strong growth in indexed assets."

Mr. Beasley also noted the success of minority-owned firms like Ariel and NCM, in light of the recent trend toward hiring minority- and woman-owned firms.

"Multiple-product firms are beginning to see the payoff," noted David O'Donovan, senior vice president in SEI Corp.'s Chicago office. A number of firms in the top two categories offer a wide selection of core and specialty investment products. He also noted several specialty firms are broadening their asset classes. "Specialty boutiques are moving towards a multiproduct strategy in order to better withstand difficult periods," he said. ■

Pensions & Investments welcomes news of personnel changes. Send items to:
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Chicago, Ill. 60611
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Largest dollar gain overall*

(Jan. 1, 1987 to Jan. 1, 1991)

	$ millions
State Street Bank	34,034
Northern Trust	17,148
Mellon Capital	14,195
Equitable Real Estate	12,781
Metropolitan Life	11,865

Largest percentage gain overall*

(Jan. 1, 1987 to Jan. 1, 1991)

	Increase
NCM Capital	10,771.43%
Schroder Real Estate	900.00
Morgan Grenfell Capital	772.14
Morgan Stanley/ Chicago Group	767.33
JMB Institutional	534.13
First Interstate/ Wash.	522.71

*U.S. institutional tax-exempt assets

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AT DEADLINE

TSA Capital could be sold

Trust Services of America, which owns TSA Capital Management, could be up for sale.

Richard Boling, a senior vice president at TSA Capital, confirmed there is a list of bidders, but an official of Cal Fed — the savings and loan parent of both firms — said there's been no official word of a planned sale.

Meanwhile, the International Paper pension fund dropped TSA Capital as an equity manager.

Nomura Capital on probation

The $66 billion California Public Employees' Retirement System put Nomura Capital Management on probation last week. The action took place following revelations that Nomura's parent company had compensated some of its leading clients for investment losses.

Nomura Capital managed about $500 million for the fund in international equities.

Funds reveal hirings

The $170 million **Intermountain Health Care** pension fund hired Burgess Capital to manage $17 million in international equities. . . . The $250 million **Illinois Power** pension fund placed $5 million with Parvest International, a venture capital fund. . . . Fairfax County, Va., hired Bank of New York as master custodian for the **Supplemental Retirement**, **Fairfax County Uniformed Retirement** and **Fairfax County Police Officers Retirement** systems, with combined assets of $925 million. . . . The **PBGC**, in restructuring its $4 billion-plus portfolio, allocated $100 million in active equity accounts to Newbold's Asset Management, Fayez Sarofim and Lehman Ark Management.

INSIDE

MICHAEL A. MANCOTTE

Savings plan on track

G.E. Rail Car Services set up 401(k) plans for employees at its 12 non-union plants nationwide — including this one in Chicago Heights, Ill. — after management decided it wanted to encourage personal savings. Page 19.

Pan Am termination is probable

PBGC, Delta vie for shuttle assets

By Joel Chernoff

WASHINGTON — After years of struggling, Pan Am Corp. is likely to jettison some $840 million in unfunded pension liabilities onto the Pension Benefit Guaranty Corp.

The likely demise of the airline and termination of its pension plans has pitted the pension agency against Delta Air Lines Inc. and other creditors of Pan Am over the assets of the Pan Am shuttle.

The termination of New York-based Pan Am's pension plans "is probably inevitable at some point," given reported statements by the airline that it plans to pursue an orderly liquidation and assuming Pan Am completes its plan to sell off its major assets, a PBGC spokeswoman said.

That might cause the agency to absorb its largest loss ever, excluding losses from The LTV Corp. plans that subsequently were restored to the company. The PBGC had a $1.8 billion deficit as of Sept. 30, reflecting partial bookings of probable losses from Pan Am.

The PBGC hopes to use some of Pan Am's assets to offset the carrier's $840 million unfunded pension liability.

Jeff Kreindler, a Pan Am spokesman, declined to comment as to whether the company's three pension plans would be terminated. He denied, however, Pan Am has stated it is pursuing an orderly liquidation.

The question for the PBGC is how much it will be able to recover from Pan Am's dwindling estate. Right now, the fight is centered on who will get top claim to assets of Pan Am Shuttle Inc., in a situation that pits the agency against Delta Air Lines Inc., Atlanta.

Delta has offered to purchase the shuttle, certain Pan Am international routes and aircraft for $260 million.

The PBGC holds all of the shuttle's stock as collateral for a $53 million waiver of Pan Am's 1989 pension contributions. That won't present a problem because that obligation will be paid when a sale is consummated.

The key issue stems from the residual value of the shuttle, which is a separate legal entity from the airline. The PBGC plans to file a contingent unsecured claim against the shuttle. Unlike other creditors, the PBGC can pursue joint and several liability claims against all companies commonly controlled by a company whose pension plans are underfunded.

Part of that claim will have priority status, reflecting unpaid pension contributions, and will aid the agency in offsetting the plans' unfunded liabilities.

But Delta wants to insert itself ahead of the PBGC in the creditors' line for the shuttle in exchange for providing Pan Am

See **Pan Am** *on page 39*

Insurer's plight has sponsors on guard

By Hillary Durgin

Pension fund investors, fearful the "run on the bank" experienced by Mutual Benefit Life Insurance Co. could be repeated at other carriers, are likely to revaluate insurance company investments, pension consultants said.

Massive withdrawals by policyholders of Mutual Benefit, Newark, N.J., triggered by concerns over the company's troubled real estate investments, drove the insurer to seek protection against insolvency from the New Jersey State Department of Insurance last week. A New Jersey Superior Court judge placed the company under state rehabilitation July 17.

"The run-on-the-bank phenomenon is really becoming a dominant concern whenever investors get a sense that a company's assets may be vulnerable," said Kim McCarrel, consultant with Wyatt Asset Services, Portland, Ore. "What we're seeing here is a fair erosion of confidence in the insurance industry."

Wyatt had "several clients" that placed contracts with Mutual Benefit in December and January, she said.

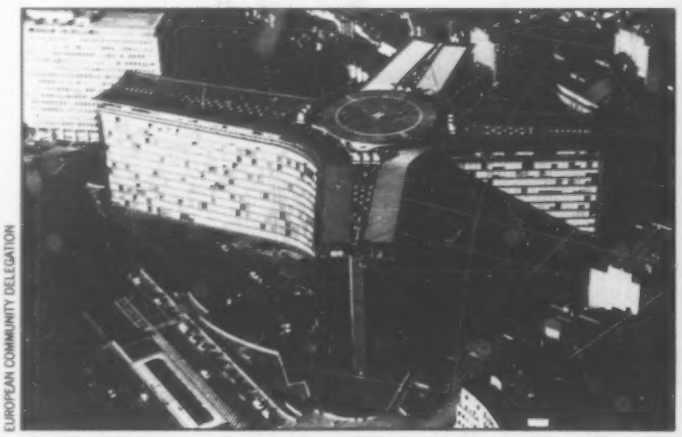
The fear of this nascent phenomenon occurring at other carriers has exacerbated pension executives' concerns over the safety of investments in insurance industry-backed annuities and guaranteed investment contracts, consultants said.

"The greater applicability of 'run-on-the-bank' risk makes an emphasis on quality and industry diversification more applicable than before," said William D. Templeton, director of insurance consulting in the Atlanta office of TPF&C, a Towers Perrin company.

The concern over insurer solvency that began with carriers' junk bond investments — highlighted by the collapse of Executive Life Insurance Co., Los Angeles — is now centering on the industry's troubled real estate holdings, spotlighted by problems at insurers including Mutual Benefit, said Thomas H. Borman, former commissioner of commerce for the state of Minnesota, at a House Energy and Commerce subcommittee hearing last week.

"We are not only witnessing a rapid and sustained rise in the default rate, but we also are reaching a level of distress in insurers'

See **Insurers** *on page 39*



EUROPEAN COMMUNITY DELEGATION

A proposal of the European Commission, whose headquarters is shown above, could lead to pan-European pension funds.

European changes

Directive would liberalize investments

By Margaret Price

As early as this week, the European Commission is expected to take steps leading to greater investment freedom for European pension funds and ignite a process that eventually could lead to pan-European pension funds.

Pensions & Investments has obtained a copy of a proposed European Community draft directive on European pensions. The draft calls for broad liberalizations on two main fronts: freedom of cross-border investing within the European Community and freedom of cross-border pension fund management.

The provisions would apply only to governmental decrees and not to the investment programs of

See **Freedom** *on page 33*

NEWS DIGEST

MICHAEL J. CLOWES

The Kremlin in Moscow is the focal point of radical change in the Soviet Union. *P&I* Editor Michael Clowes recently was part of a group exploring U.S.S.R. investment opportunities. Page 27.

SPECIAL REPORT: EMPLOYEE BENEFITS

Attempts to trim retiree health costs are leading corporate executives to review their overall benefit packages. *P&I* examines this and other issues. Page 19.

FINANCING

Time Warner's revised proposal to issue stock rights hasn't derailed the suit of three pension funds. Page 37.

INTERNATIONAL

The European Commission may soon liberalize pension fund investing. Page 1.

Institutional investors have discovered the Latin American debt market. Page 8.

REAL ESTATE

AMR and 13 others sign up for GE Investments' second realty partnership. Page 2.

The Core Group Trust, a co-investment vehicle, buys into a mall complex in Pentagon City, Va. Page 3.

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Master trust survey under way

Questionnaires for *Pensions & Investments*' annual survey of the largest master trust, master custody and global custody banks have been mailed. The completed forms, to be used for a special report published Oct. 14, must be returned by Aug. 15. If you have not received a questionnaire, or if you have any questions, contact Christine Philip, directory coordinator, at (312) 649-5217.

GE brings realty to light

Partnership nets $276 million despite difficult market

By Steve Hemmerick

STAMFORD, Conn. — GE Investments has persuaded 14 pension plans to invest $276 million in its new commingled real estate fund in a real estate market where it is difficult to get new investors.

The contributions to the GE Investment Realty Partners II fund came partly as a result of the decision by the pension fund of the money manager's parent, General Electric Co., to invest in the fund, according to Geoffrey Norman, executive vice president with GE Investments.

He said the amount the GE fund contributed is "substantial," but he wouldn't disclose the amount.

With its own or a parent's contribution to invest, some pension executives — stung by poor-performing commingled funds — believe the manager will act more prudently, investing with regard to future performance rather than racking up acquisition or management fees.

"We just think their interest is more in line with ours as an investor because they have their own money in it," said William Quinn, president of AMR Investment Services, Fort Worth, Texas, the in-house investment subsidiary that oversees American Airlines Inc.'s employee benefit funds. The airline's $2.5 billion defined contribution plan contributed about $10 million to the GE Investments fun

"They (GE Investments) are in it as an investment as well as a fee. We think people raise funds and go out and make transactions whether they make sense or not if they are in it only on a fee basis," said Mr. Quinn.

Among the 14 pension or en-

See **GE** *on page 39*

TOM REED

William Quinn likes the fact GE Investments' parent also is investing in the partnership.

Warburg gains in rights deal

By Marlene Givant Star

LONDON — U.S. venture capitalist E.M. Warburg, Pincus & Co. Inc. has more than doubled its stake in Britain's Aegis Group PLC in a transaction that worked within the United Kingdom's preemption rights framework.

The Aegis stake is Warburg, Pincus' biggest investment outside the United States.

Pre-emption stock rights provisions in many countries require a company that sells more than a certain amount of additional stock for cash to make the stock available to existing shareholders first, on a pro-rata basis, before it sells to the public.

Although such offerings usually are done at a discount to the market share price, Warburg, Pincus paid a premium. The structure also was unusual in that warrants were attached.

"The rights problem is difficult for would-be investors like venture capital firms," said Jonathan Brown, vice president of Salomon Brothers International Ltd., London, the adviser to Aegis.

"It was a fantastic deal for the company. One share and one warrant were sold for (about $4.24) while the current share price was (about $3.14 the day before the transaction)," he said.

The deal also was noteworthy for Aegis' use of a U.S. investment bank. Salomon has been the company's adviser for over two years.

The deal took the form of an issue of units, each consisting of one new ordinary share of Aegis and one warrant to subscribe for a further new ordinary share. The warrants have a seven-year life and will be exercisable at any time at a price of about $5.13.

In keeping with U.K. pre-emption rules, Aegis had to offer shares to other stockholders on a pro rata basis. But because of the premium and the unfamiliarity of many U.K. investors with warrants, only 2.4% of shareholders subscribed to the issue, allowing Warburg, Pincus to more than double its stake in the company at a set price.

The key reason the venture capital firm chose this route was to avoid the possibility of having to pay high prices to accumulate a large stake on the open market, which would have inflated the price.

The stock market hasn't been as bullish on Aegis as is Warburg, Pincus. Aegis, a media-buying holding company, has been painted with the same broad brush as the out-of-favor advertising sector, said Mr. Brown.

Thomas Daly, a spokesman for

See **Aegis** *on page 38*

Stanford realigns operations

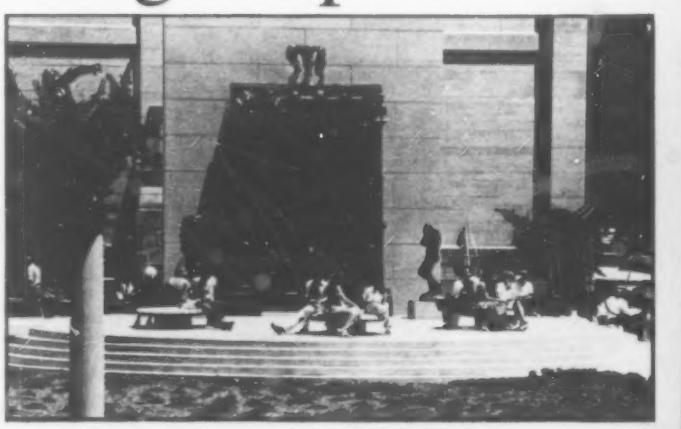
School establishes management firm

By Steve Hemmerick

STANFORD, Calif. — Stanford University has established a new investment management company and shifted key functions of the treasurer's office to it in a major financial reorganization.

Laurance R. Hoagland Jr. has been named president and chief executive officer of Stanford Management Co. Stanford Management has assumed investment management responsibility for $3.6 billion in university assets from its treasurer's office and two real estate groups, including the university's $1.9 billion endowment.

According to university officials, the new management company will be able to pounce on investment opportunities and bring more depth and expertise to financial strategies than under the previous structure.



Stanford University is following the path of other top schools with the establishment of its investment management subsidiary.

Stanford has joined other major universities that have set up management organizations in past years, such as Harvard, Yale and Princeton.

Stanford Management "will position Stanford for the investment climate of the 1990s, which requires more depth of expertise and the ability to move quickly as (investment) opportunities arise," said William F. Massy, director of Stanford's Institute for Higher

See **Stanford** *on page 39*

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Matrix founders off to set up own firm

By Marlene Givant Star

GREENWICH, Conn. — The two founders of Matrix Capital Management have left to set up their own shop.

Matrix, a subsidiary of the Prudential Insurance Co. of America, was founded in December 1985 and manages $650 million for 18 U.S. tax-exempt clients in quantitative equity, fixed-income and tactical asset allocation techniques.

Michael Petrino, president, and Hugh Neuburger, managing director, departed to form a new firm, which might be backed by a domestic or foreign partner. E. Clarissa Moore, marketing director, left with them.

Mr. Petrino said the new firm will focus on global and domestic tactical asset allocation with a special emphasis on implementation using derivatives. In addition to U.S. tax-exempt clients, it would target foreign investors, and will use new futures-related products geared to pension fund clients.

"When you work for a large insurance company as a subsidiary, they own it and can run it anyway they want. That's fair. We built it and grew it to a fairly good-size company. It was a worthwhile experience for us. We want to strike off in different directions," Mr. Petrino said.

Matrix officials say the firm's investment process won't suffer as a result of the defections.

Douglas Love, managing director in charge of fixed income, options and futures, who joined the firm more than two years ago from BEA Associates, New York, said: "Being a quantitative firm, the processes rely heavily on computer-based systems. Those are all in place and being operated by people who operated them all along on a day-to-day basis."

"Although administration and marketing were somewhat specialized within the firm, investment activities were and are run on a very collegial basis, so it's not as if there was a lot of senior/junior vertical decision-making on the investment side . . ."

Harry Knapp, president of Prudential Affiliated Investors, the holding company that oversees nine competing investment management subsidiaries of the insurer, has been named interim chief executive officer of Matrix.

Mr. Love will continue to head fixed income. Randy Hood will remain director-asset allocation; David Sheridan will remain director-equity management. Matrix plans to add at least one investment professional in light of the departures. ■

CORRECTIONS & CLARIFICATIONS

● A table on Page 8 of the July 8 issue incorrectly implied a surge in mortgage defaults at **UNUM Life Insurance Co.** The apparent change was caused by a realignment of UNUM's corporate structure in 1990 that reduced UNUM Life's surplus by 65%. In May 1991, $75 million in additional capital was transferred to UNUM Life by its parent, UNUM Corp., and UNUM Life Insurance of America.

● **John M. Deignan**, head of United States Trust Co.'s institutional asset services and securities services and trust operations divisions, has been promoted to executive vice president. His position was misreported July 8.

● **Quaker Capital Management**'s PIPER+ balanced fund was omitted from the PIPER returns in the May 27 issue. The fund returned 26.8% for the quarter ended March 31; 29.2% for one year; and a compound annual 16.2% for five years, which would have placed it in the first decile for those time periods.

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MARY HERLEHY

Chicago municipal workers could be among those affected by the IRS rules on benefits standards.

IRS rules ruffle public funds

Officials say setting benefits standards is overstepping law

By Ellen Perlman and Trudy Ring

WASHINGTON — IRS rules setting benefit standards for state and local retirement systems — estimated to cost more than $4 billion over the next five years — have incensed officials of those systems.

The Internal Revenue Service rules implement a provision of the 1990 Omnibus Budget Reconciliation Act, requiring that public employees, including many part-time or temporary workers, be covered either by an employer's pension plan or Social Security.

State and local officials, however, say the rules have gone beyond Congress' intent in OBRA in that they not only would mandate benefits but would set standards those benefits must meet.

"The IRS says although you have a qualified retirement system, we're going to set benefits for the state, overstepping states' rights to set up a retirement plan," said Richard E. Schumacher, executive director of the Ohio Public Employees' Retirement System, Columbus. "They're saying if you don't have a certain kind of plan, you have to use ours. It becomes a very volatile issue."

"We truly feel that's not what Congress intended," said Cathie Eitelberg, director of the pensions and benefits program of the Government Finance Officers Association. There is a move afoot in Congress to introduce legislation to clarify the law's intent, she said.

The IRS released the final rules June 28. Plans that already were in existence when the law passed have until Jan. 1, 1993, to comply; newer plans have to comply by Jan. 1, 1992.

When OBRA was passed, Congress estimated the benefits provision would cost states and municipalities $4 billion during the next five years. Ms. Eitelberg said that figure was based only on bringing employees not now covered by a retirement program 5into either an employer-sponsored plan or Social Security, not on having to add Social Security coverage for people already covered by a plan that does not meet

See **IRS** *on page 38*

Equity indexing gains continue

International, domestic still ride high

By Fred Williams

Despite claims by some that it has peaked, index fund investing in all market segments continued to show strong gains for the six months ended May 31.

Once again equity indexing — both international and domestic — showed the strongest overall gains.

International equity indexed assets were up 35.6% for the period to $32.224 billion from $23.762 billion in December, 1990. Adjusted for the 11.6% increase in the Morgan Stanley Capital International Europe Australia Far East Index, international equity indexing was up an impressive 21.5% for the six-month period.

Domestic equity index fund assets jumped 30.2% to $224.953 billion during the period, from $172.726 billion. That represents only a 5.8% increase when adjusted for the 23.12% increase in the Standard & Poor's 500 Stock Index.

On the fixed-income side, domestic fixed-income assets increased 12.5% to $83.519 billion from $74.263 billion. When adjusted for the Shearson Lehman Brothers Government/Corporate Bond Index's 5.94% gain, domestic fixed-income indexed assets grew 6.2%.

International fixed-income funds increased by 10.3% to $1.338 billion, a market-adjusted 9% increase from $1.213 billion in December. The Salomon Brothers World Government Bond Index was up a scant 1.19% for the period.

The total index fund assets of 53 leading index managers surveyed by *Pensions & Investments* was $342.034 billion on May 31, up 25.8% from $271.964 billion reported Dec. 1.

Wells Fargo Nikko Investment Advisors, San Francisco, remains the largest index manager and is approaching $100 billion in assets under management in index funds. As of May 31, Wells Fargo Nikko had $99.855 billion in indexed assets under management.

Indexing, at least on the equity side, will remain a growth industry for the foreseeable future, said Tim Barron, consultant with The Wyatt Co., Cleveland.

"The line between indexing and active management is getting less distinct," he said. "An index (fund manager) buys 500 stocks for full replication, but what about funds with a statistical sampling of 200 or 300 stocks. The line gets hazy. Given that, indexing is not only here to stay but is a growth business."

The line also is blurred in the fixed-income area, he said.

"I've seen a lot of focus on the use of fixed-income indexes, but with fixed income you can usually make a few adjustments and give yourself some over the index."

"My prediction is that bond indexing is not a growth business, but index-plus or enhanced indexes may be in for further growth," he said.

Another attractive feature about indexing, he said, is its low cost, which has now become "almost commodity-like."

John Meneghetti, vice president and manager of quantitative services at NCNB-Texas, said part of the reason for the strong surge in indexed assets during the period may be market related.

"Last year about three out of four managers underperformed the S&P 500 and if plan sponsor decisions were being looked at toward the end of the year, I can see where some changes may have

See **Indexing** *on page 37*

Investors discover Latin debt market

By Marlene Givant Star

The Latin American debt market has been like a party without many guests.

"It's odd that it's such a huge market, yet most people don't know it exists," said Kieran P. Donnelly, head of Latin American investments of Deltec Securities Corp., New York, noting the Latin debt market's 1990 trading volume was $100 billion.

But institutional investors now are streaming into the huge market, attracted mainly to high-yielding, U.S. government-collateralized Brady bonds.

Farmers Group, Los Angeles; Trust Co. of the West, Los Angeles; Magten Asset Management, New York; and Deltec Securities are among the institutions investing in the market. Baker Nye Investments, a New York arbitrage and special situations manager, is researching Latin debt opportunities.

In the past two years, the few professional money managers that have gone "party hopping" among Latin debt markets have enjoyed the festivities, chalking up compound annualized returns of more than 20% by acquiring sovereign and corporate bank loans and equities in countries considered likely to restructure under a Brady plan, and awaiting potentially significant capital appreciation if and when a plan is adopted.

Treasury Secretary Nicholas Brady's plan to deal with the Third World debt crisis calls for a partial forgiveness of principal and a reduction of interest. So far, Mexico, Venezuela and Costa Rica have had their bank debt restructured through Brady plans, with most of the five-year bank debt exchanged for new, longer-dated publicly traded Eurobonds.

In Mexico's plan, the model for the others, the bonds were collateralized by U.S. government zero-coupon bonds with the added protection of 18 months of interest guaranteed on a rolling basis through assets held by the collateralizing agent, payable if the government defaults.

Nigeria, Poland, Brazil, Argentina, Morocco, the Philippines and Equador are viewed by market participants as Brady plan candidates.

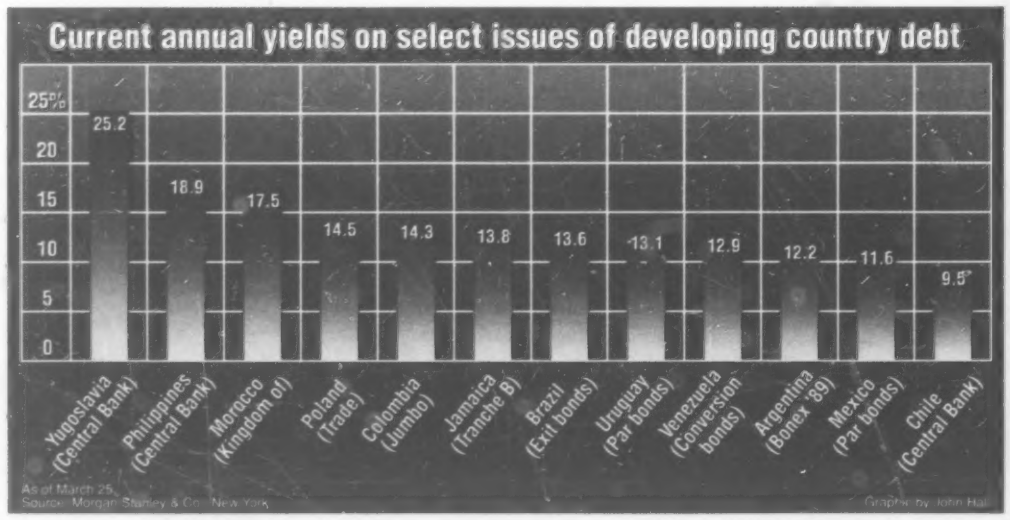
"The time to do it is now because once a Brady plan is done, the bonds go up to a point where they don't have the same sort of appeal. Now there's a yield and capital gain play. Later on, it becomes a pure yield play," said Arthur Byrnes, chairman of Deltec, which manages $100 million in Latin American paper, of which 65% is for clients.

"Typically we expect to realize 50% returns in our corporate and sovereign debt restructurings," said Jerry Finneran, president of TCW Americas, a Latin debt fund operated by Trust Co. of the West.

Several funds geared to institutional investors have been or will be launched in coming months.

Morgan Stanley & Co., New York, expects to raise $100 million in the first closing of a Latin debt limited partnership by the

See **Debt** *on page 36*



REAL ESTATE

Double whammy pulls down investments by Japanese

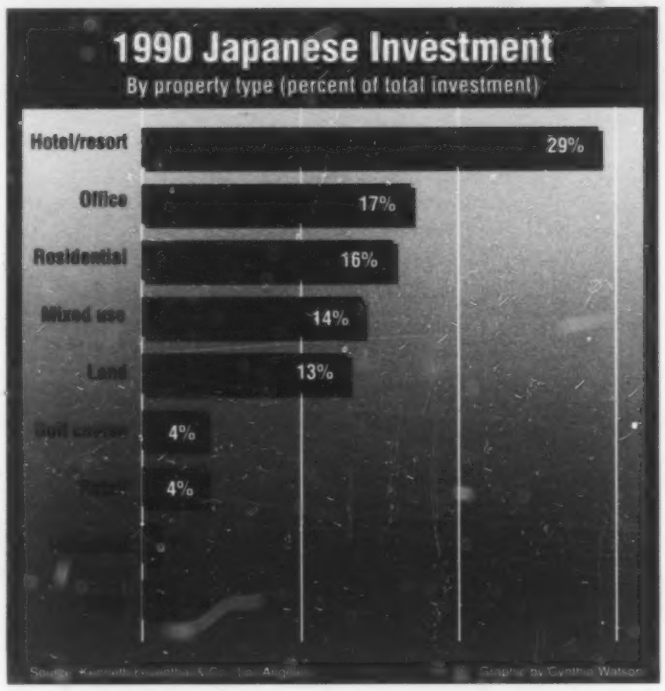
■ Japanese investment in U.S. real estate decreased 12% in 1990, to $13.06 billion from $14.77 billion in 1989, a report by Kenneth Leventhal & Co. shows.

Jack Rodman, a managing partner and director of Leventhal's Pacific Rim activities, said the recession and weak real estate markets in the United States were among the reasons for the decline. Japanese property values, meanwhile, leveled off.

Of the $13.06 billion, the largest share of Japanese money — 29% — was invested in U.S. hotels and resorts, for the second year in a row. Hawaii's share declined, to 28% from 46% in 1989. California and Guam, a U.S. territory, each accounted for about one-fifth of the Japanese investments in that asset class.

Residential properties, especially in California, "will attract the most interest among Japanese investors" this year, said Jack Barthell, a partner in Leventhal's Los Angeles office. That's because residential development creates opportunities to realize high returns in a relatively short time when compared with commercial development, he said.

Full ownership — as opposed to joint ventures — accounted for the majority (57%) of Japanese investments for the first time in 1990, while investments in new construction increased and those in existing properties decreased. Those changes reflect the greater knowledge and comfort level Japanese investors have acquired about U.S. real estate and the development cycle, Mr. Rodman said.



FINANCING

French bank takes a U.S. partner

■ NEW YORK — Societe Generale, France's largest private sector bank, and The Lodestar Group, an investment banking boutique, have entered into a strategic partnership specializing in corporate finance advisory work.

Subject to approval of the Federal Reserve Board, Societe Generale will make an investment in the partnership.

Yamaichi Securities also is a minority investor in Lodestar.

The venture will emphasize mergers, acquisitions, divestitures, joint ventures and financial restructuring.

Lodestar and Societe Generale teams are working together on two cross-border transactions. In the future, Lodestar will employ Societe Generale professionals to work on behalf of clients in Lodestar's New York offices.

Societe Generale has a team of 22 mergers and acquisitions professionals in Paris, Frankfurt and London and plans to open offices in Spain and Italy.

FOUNDATIONS

CFO starts own management firm

■ Gary M. Thomas, chief financial officer for the $260 million Wesley Foundation, Wichita, Kan., has formed his own investment management firm — Prestwick Associates Inc., also in Wichita.

Mr. Thomas will continue to manage $42 million of the fund's assets that had been managed internally and supervise its five outside managers.

The foundation has gone through what Mr. Thomas referred to as a "major restructuring," re-evaluating its investment policies. "They have changed from generalists to specialists," he said.

The foundation's latest tactical move was in its 1-year-old, internally managed $14 million Asset Allocation Fund or "swing fund." The assets are actively managed and rotate among value, growth and large- and small-capitalization stocks, adjusting to perceived risk factors. In March assets were committed heavily to small-cap growth stocks, but most recently the fund shifted into 100% cash because of what is perceived as high risk in the market.

The new firm has several other clients, including institutions, which Mr. Thomas declined to name.

Mr. Thomas' brother, Kent R. Thomas, has joined the firm as a consultant.

Gary M. Thomas

INTERNATIONAL

Roll of dice on German real estate

■ Controls on German property development and mortgage financing could help investors there avoid the fall in property values that plague investors in U.S. properties.

The controls in Germany should support property values and rents during the 1990s, according to a report on the German real estate market by Salomon Brothers Inc., New York.

But David J. Kostin, a Salomon vice president and author of the report, said Germany also faces potentially serious obstacles not found in the U.S. market.

While Germany has been identified as the gateway to the Eastern Bloc economies, there are uncertainties surrounding "glasnost" and "perestroika" that raise questions about the economic viability and political future of the Soviet Union.

Another potential problem is that German unification requires massive public sector borrowing. But the Bundesbank has raised interest rates, which could limit future growth.

There also is uncertainty about the legal basis of property rights in East Germany.

COURTS

Chevron settles lawsuit over surplus assets

■ Chevron Corp., San Francisco, has agreed to pay $245 million to beneficiaries of former Gulf Oil Corp. defined benefit pension plans to settle a lengthy dispute over the ownership of hundreds of millions of dollars in surplus assets held by two overfunded Gulf plans.

The settlement was reached in late June, following an April ruling by a U.S. District Court judge in Houston.

The April judicial ruling had awarded plan participants the $190 million in surplus held by the two plans.

The judge had ruled the wording in the plan documents indicated Gulf Oil had intended any surplus assets to be distributed to plan participants.

Chevron had said it would appeal that ruling.

Under the settlement, the 19,000 plan participants will receive $150 million in accrued benefits in a lump sum, plus half — or about $95 million — of the surplus.

Chevron, which acquired Gulf in 1984, will retain the other $95 million.

Not affected by the settlement is another portion of the April ruling that held Chevron is entitled to $620 million in surplus assets contained in another Gulf pension plan.

That plan made it clear any surplus assets would revert to the employer, the U.S. District Court ruled.

The participants in the plan are contesting that portion of the ruling.

Attorneys for the employees could not be reached.

WASHINGTON

Congressmen put ESOPs on agenda

■ A band of 36 congressmen is working to regenerate grass-roots support for employee stock ownership.

Rep. Beryl F. Anthony Jr., D-Ark., introduced the ESOP Promotion and Improvement Act of 1991, H.R. 2410. A comprehensive bill, it would give company employees an 80-day window period to form an ESOP in response to a foreign takeover offer. Reps. Dana Rohrabacher, R-Calif., and Cass Ballenger, R-N.C. are leading cosponsors of the legislation, introduced May 21.

Rep. Beryl F. Anthony Jr. has introduced an ESOP bill.

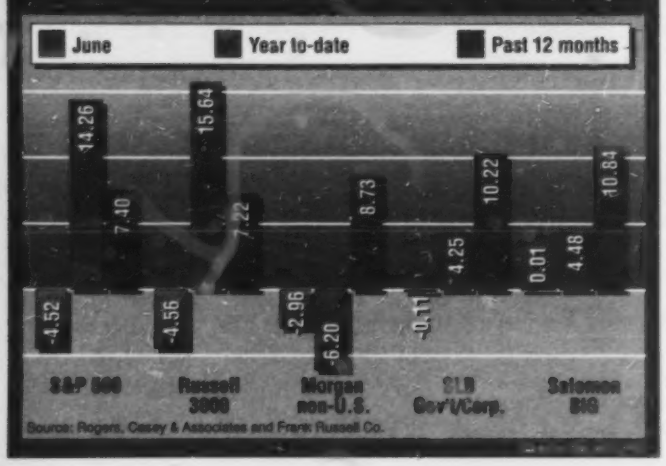
"There is ample evidence, especially in the past five years, that employees can benefit greatly in financial terms by having an ownership stake in their corporation, and that an ownership culture among employees can greatly enhance the overall quality of work and competitiveness of the corporation with employee ownership," Rep. Anthony told members of Congress when he introduced the bill.

The bill also affirms the legality of arrangements that combine ESOPs with 401(k) plans. The Internal Revenue Service is studying issues of non-discrimination testing and the use of employer or employee contributions to repay leveraged ESOP loans in conjunction with these types of plans.

The legislation also would extend ESOPs to Subchapter S corporations, chartered corporations with 35 or fewer shareholders that are taxed as partnerships. These corporations comprise nearly one-third of all companies in America, Rep. Anthony said.

Pensions & Investments' indexes

The P&I monthly indexes track changes in the Standard & Poor's 500 Stock Index, Frank Russell Co.'s Russell 3000 Stock Index, the J.P. Morgan non-U.S. Government Bond Index, the Shearson Lehman Brothers Government Corporate Bond Index and the Salomon Brothers Broad Investment Grade Bond Index.



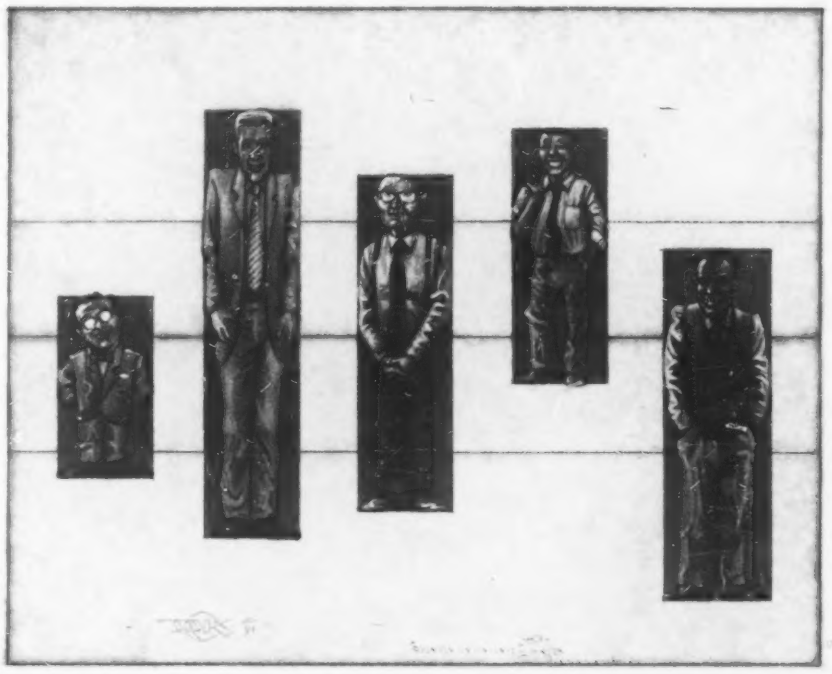
Flaw of using 'median manager' as benchmark

In terms of performance evaluation, perhaps the most widely used benchmark, aside from market portfolios like the Standard & Poor's 500 Stock Index, is the "median manager." Taken from a universe of managers, the median manager benchmark has a certain naive appeal. The conventional wisdom expects that a superior manager will outperform the median manager over, say, a three- or five-year evaluation period. But is the median manager an acceptable benchmark?

Proponents of the median manager benchmark never have presented evidence supporting its validity. The validity has always been asserted, not demonstrated.

Many pension fund sponsors, consultants and managers use the median manager from a universe of managers. These manager universes are easy to construct and maintain. But are they useful?

To evaluate the median manager benchmark, we applied a set of benchmark quality measures we've developed. A well-known universe comparison service supplied us with data on the performance of the median performing manager in the growth manager segment of the universe. (This universe comparison service, we point out, segments its equity manager universe in response to concerns that a manager universe incorporating a broad group of equity managers wasn't sufficiently representative of different manager investment styles. Consequently, if we find the median style manager benchmark wanting, that criticism will apply even more strongly to other manager universes that don't segment styles.)



DOUGLAS KLAUBA

Jeffrey V. Bailey, David E. Tierney and Thomas M. Richards, principals at Richards & Tierney Inc., Chicago, wrote this commentary. Their study "Evaluating Benchmark Quality" expands on this analysis.

For our study, we used the returns for a well-known manager who is universally classified as a large-capitalization growth manager. Thus, there should be no question concerning the comparability of this manager's performance against the median growth manager.

Immediately we encountered problems. Like all users of manager universes, we have no access to the composition of the median manager's portfolio and have unanswered questions. Is there any correspondence between the securities in which our large-cap growth manager invests and the area of expertise represented by the median manager benchmark? Could our large-cap manager actually invest in the median manager's portfolio? Is there any similarity in the risk exposure of our large-cap manager and the median manager?

The inability to examine the composition of the median manager's portfolio eliminates any use of that benchmark in total portfolio risk control. It undermines the benchmark as a performance evaluation tool. The median manager benchmark is an investment apparition; the only trace of its existence is its reported returns.

We can apply to the median manager only the three benchmark quality measures that involve returns. These measures relate to evaluation "noise," investment style and value-added. To explain, we begin with three return series for 1) the manager's actual portfolio 2) the median manager and 3) the S&P 500. The results cast a poor light on the median manager benchmark.

With respect to the first measure, we believe a good benchmark should reduce evaluation "noise." To understand, consider a manager with perfect foresight. Every month the manager outperforms the benchmark by 0.25%. By definition, the standard deviation of the manager's value-added performance is zero. In this case there is no evaluation "noise." That, however, is not the real world. There will be a period-to-period variation in a manger's value-added performance. However, we believe, the better the benchmark, the lower will be the period-to-period variation.

Period-to-period variation can be measured by standard deviation. In the case of the median manager, the standard deviation of the manager's performance vs. the median manager benchmark was 8.1% per annum. By comparison, the standard deviation of the differences between the manager and the S&P 500 was 7.6% per annum. The median manager, selected from a growth stock manager universe, did not reduce any evaluation "noise." Rather, it obscured the manager's investment skill.

As mentioned, the second measure relates to a manager's investment style. Again, we consider the three return series. Each time period, we calculate two return differentials. The first is the excess return difference between the manager's actual return and the S&P 500. The second is the excess return difference between the median-manager benchmark and the market. Since we now have two return differentials for each time period and also a number of time periods, we can calculate a correlation coefficient.

A good benchmark will result in a high, positive correlation coefficient. That is, when a manager's style is in favor we expect both the portfolio and the benchmark to outperform the market. Alternatively, when out of favor, both can be expected to underperform. Using the median manager as a benchmark results in a correlation coefficient of 0.297 which is only slightly greater than zero. As an aside, we believe a good benchmark will have an excess return correlation coefficient of 0.5 or greater.

The third quality measure involves the pattern of a manager's value-added performance. We believe managers do not become instantaneously smart or dumb. It is a continuous process. A good benchmark will reveal the "goodness" of a manager's investment process regardless of the market environment.

To address this issue, we again calculate a correlation coefficient of return differentials. One input is the excess return difference between the median-manager benchmark's return and the market return. This can be considered to be the investment style return. The other input is the value-added return, which is the difference between the manager's actual portfolio excess return and the median-manager benchmark's excess return. We believe the correlation of these two return differentials should be close to zero. Anything significantly different suggests the manager's value-added capability was related to the market environment and whether the manager's investment style was in or out of favor.

In our case of the growth manager vs. the median manager as the benchmark, the correlation coefficient was −0.450. Obviously, the correlation is different from zero. It suggests the manager will look good when the median growth stock manager underperforms the market and vice versa.

In short, we fail to find any evidence the median growth manager is an acceptable benchmark for our growth manager. We strongly suspect these results would apply as well to other median manger benchmarks taken from other manager universes.

The median manager benchmark violates virtually all of the fundamental properties of a valid benchmark in the sense it is ambiguous, uninvestible and not specified in advance. In addition, the median manager benchmark has severe survivor biases. Our evidence shows the median manager benchmark fails to pass a series of reasonable benchmark quality tests. We believe those practitioners who have so uncritically employed the median manager benchmark in performance evaluation should reconsider their advocacy. ■

LETTERS TO THE EDITOR

Oh, not those total assets

■ Somehow, we got some wrong numbers to you that appear in the May 20 issue, profiling money managers.

The table on page 3 lists Banc One Corp. as having $44 billion under trust management. That is the corporation's total assets. The number should have been $13.6 billion. My concern is not that a correction be run, but that next year when growth numbers are computed that they are based on the proper number. Otherwise, the statistics will show a dramatic drop (assuming we get the right number to you for 1992).

John A. Russell
Vice president
Director of communications
Banc One Corp.
Columbus, Ohio

No balanced, no TAA

■ The description for our firm in the May 20 issue is incorrect.

Burgess Capital doesn't offer a balanced product. We do currently manage a balanced account, but this is not an offered product.

Also, Burgess Capital also does not use tactical asset allocation.

Christine C. Mangan
Vice president
Burgess Capital Corp.
Redwood City, Calif.

Adding international equity

■ Two corrections are necessary for the profile of Loomis, Sayles & Co. on page 56 of the May 20 issue.

First, the description should be: Loomis, Sayles & Co. is an active domestic *and international* equity . . . manager.

Second, the client contact is myself.

Douglas R. Nelson
Managing partner
Loomis, Sayles & Co.
Pasadena, Calif.

A change in numbers

■ I am writing to correct some of the statistics in the profile of Princeton Bank and Trust Co. in your May 20 directory of investment advisers.

Its total assets under management as of Jan. 1 were $1.542 billion, of which $1.359 billion were discretionary. Total tax-exempt assets managed were $301 million, of which $256 million were discretionary. The firm had $60 million in 401(k)/457 assets. The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

Joseph E. Serzan
Vice president-institutional services
Princeton Bank and Trust Co.
East Brunswick, N.J.

A fuller description

■ The description of the investment style in the May 20 profile of HD International omits several points and gives an erroneous view of our firm. The description should have read:

The firm, an international/global equity manager, uses an active top-down approach emphasizing growth with strict valuation disciplines. Clear definitions of growth are applied to both country and stock selection. Our top-down, rate-of-return forecasts are translated into country allocations resulting in concentrations in a limited number of countries.

In addition, a typographical error has HDI managing $15 billion in international fixed-income assets rather than $15 million.

Francine R. Elster
Vice president
HD International Inc.
New York

Kurtz's better betas

The betas in the July 8 letter from Lloyd Kurtz, senior research analyst with Kinder, Lydenberg, Domini & Co. Inc., Cambridge, Mass., should have been expressed as plain numbers as he correctly did in his correspondence and not as percentages as they were mistakenly published.

Debt

Continued from page 8

end of the month. The fund, geared to foundations, wealthy individuals, insurance companies and portfolio managers, will take positions in bank loans of countries in which it expects a Brady plan. The fund will be able to borrow to a limited extent.

TCW Americas, a $225 million limited partnership of pension funds and other institutions, buys debt of governments and corporations in Latin America. TCW will market two more funds — one for pension funds and one for taxable investors — in the next few weeks, with hopes of raising another $225 million.

Thanks in part to the country's debt restructuring, Mexican companies are now tapping the international capital markets again for the first time in years, mostly with five-year public Eurobond deals.

Other Third World countries are following suit. Deals by the National Bank of Hungary and Venezuela reportedly are in the pipeline.

By converting Latin debt to a form more palatable to investors, the Brady plan has helped narrow spreads in the market by 300 to 400 basis points vs. U.S. Treasuries of comparable maturities during the past six months, according to Michael Marshall, director of corporate bonds at Salomon Brothers Inc., New York. Salomon's asset management subsidiary manages a $74 million Latin debt and equity fund along with BEA Associates, New York.

Brady bonds now yield 11.5% to 14% on a cash flow yield basis, which is still hard to match in other fixed-income instruments, Mr. Marshall said.

Salomon has begun to apply modern portfolio theory to Latin debt markets, which also should stimulate interest from institutions, he said.

"Banks, original lenders and investment banks were the market before institutions started coming in, and they are still the bulk of the market," said Jay Newman, managing director of Morgan Stanley. He estimates 20 to 30 insurers now invest in the market, whereas none did a year ago.

Commercial banks remain the principal dealers in Latin debt because they represent the market's supply.

The predominant investors are expatriates of Third World countries that are re-investing their money now that restructurings are under way, Mr. Marshall said.

The risks of Third World investing are well documented. But investors are only beginning to recognize the U.S. government backing and liquidity of Brady bonds and the size of the market, which did not really develop until around 1984, two years after the debt crisis.

"It's perception and reality. Most people say, 'Who would go into that debt and get into an illiquid kind of holding?' without realizing you can call any bank or investment bank and get a quote within a half point. That's what creates investment opportunities: the perception being quite bad and the reality being much better," said TCW's Mr. Finneran.

Latin equity markets often soar following debt restructurings, he said, noting Venezuela and Mexico are among the five top-performing equity markets in the world.

In most corporate restructurings, investors receive equity participations. The other major opportunity is to anticipate the tremendous amount of momentum a debt restructuring creates as far as an equity market. TCW has its eye on Brazil's depressed stock market.

The most conservative investors — insurance companies and pension funds — are not interested in arbitrage using complicated-to-own bank debt, as much as buying bonds for the pure yield.

Magten is eagerly tapping the Latin debt market and has purchased Polish debt. In a report to clients, Talton R. Embry, managing director and chief investment officer, said: "We believe that the bad loans that were made in 1981 will be recapitalized successfully in the 1990s. We believe this area represents a fantastic opportunity. At the present time, we have purchased the listed bonds of Brazil and the Philippines and have purchased bank loan participations in Argentina. All of these obligations are denominated and payable in U.S. dollars."

The Latin debt market has been largely untapped by investors. From 1982 through 1989 "it's done nothing but gone down, so people were losing money so it wasn't a happy place," Deltec's Mr. Donnelly said. Because individuals can't buy the debt, he said, "there's no retail market, so it's not quoted on exchanges."

After being battered in the period from 1987 to 1989, investors that stuck it out are being richly rewarded, largely thanks to attractive price arbitrage plays and/or high yields.

"Performance has been outstanding in the past six to 12 months. . . . We got in there at a lucky time," said David Iben, director of fixed-income investments of The Farmers Group, which invests a small portion of its $440 million pension fund and its life insurance and property/casualty general accounts in Latin bonds.

A year ago, Farmers invested in — and it still holds — Mexican Brady bonds. It also purchased Venezuelan sovereign bonds as well as one small issue of Mexican bank debt. Recently, it increased its Venezuelan holdings and purchased straight corporate debt of Cemex, the Mexican cement company.

"The yields are obviously good. The diversification makes sense also. The risks are real, so you have to stay diversified," Mr. Iben said.

Baker Nye officials have been looking at bank debt of Argentina and Brazil "given the slowdown in mergers. . . . We only invest in something event-driven, if we see a restructuring we can quantify and get comfortable as to timing," said George Konomos, portfolio manager at the firm, which runs $600 million, about half for pension funds. ■

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State Street Bank's Asset Management Area seeks relationship with minority and/or women-owned brokerage firms capable of executing international trades. Interested parties should contact:

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State Street Bank and Trust Company
225 Franklin Street
Boston, MA 02101

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Pensions & Investments
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Indexing

Continued from page 8

been made and may account for some of the growth," he said. Also, said Mr. Meneghetti, some plan sponsors intentionally seek market-based performance for their 401(k) funds. "Often, they don't like to explain to participants why a fund underperformed the market."

Nick Lopardo, chief investment officer at State Street Bank & Trust Co., Boston, said the growth in international equity indexing is connected with the overall interest in international investments by pension plan sponsors of all sizes.

"The movement to the international arena has led to a whole new area; a natural first step for many is international indexing. We've seen that business grow from $100 million in 1979 to $10.8 billion."

"In the last three to five years, the world has become smaller and the capitalization of the world is moving outside North America. . . . There are tremendous growth opportunities down the road for indexing. We're real bullish about where the market is going," he said.

Mr. Lopardo and others noted the lack of interest in international fixed-income indexing, blaming currency drawbacks and a heightened interest in equity markets both foreign and domestic.

"There have been spurts of activity and interest (in international fixed-income indexing) but very few clients have actually made an investment and pulled the trigger. The market just hasn't moved into international bond funds," said Mr. Lopardo.

He said interest remains high in specialized or extended indexes rather than the "pure" index such as the S&P. He said, for example, State Street developed a "second 500" stock index nearly 18 months ago and plans to convert that to the new S&P Midcap, a new index of medium-capitalization stocks.

"We're seeing a lot of interest in that and will probably enter the market soon with a Russell 2000-like product," Mr. Lopardo said.

Ryan Labs, New York, also has developed a specialized index fund product. The product matches pension liabilities to assets.

"To date there has been little, if anything, regarding having liabilities as an index. The next frontier is to have liabilities as a custom index," said Ron Ryan, president of Ryan Labs.

Mr. Ryan said his firm has developed such a liability index that can be customized to a plan sponsor's liability schedule.

"We price the liabilities daily and create a daily liability index weighted by the actual liability schedule of the plan sponsor. We break it out by duration and manage the assets to duration match the liability index but exceed the return of the liability index. We believe it is the evolution of dedication and immunization," Mr. Ryan said.

"For the first time ever, the plan sponsor knows his liability growth at all times. Traditionally, he only knew his liabilities once a year, three to six months delinquent," he said. ■

Leading index fund managers

($ millions)

Company	Total	Domestic equity	Domestic fixed income	Int'l equity	Int'l fixed income
Wells Fargo Nikko	99,855	63,600	27,000	9,000	255
Bankers Trust	64,143	51,500	8,560	3,760	323
Mellon Capital	32,155	26,270	5,320	565	0
State Street	30,380	17,209	2,167	10,840	164
AMB*	11,607	9,436	1,724	447	0
PanAgora	9,631	5,844	2,483	931	373
Alliance	9,100	8,200	22	878	0
Mellon Bond	7,500	0	7,500	0	0
Lincoln Capital	7,032	0	7,032	0	0
Dimensional Fund	5,885	4,200	876	782	27
Vanguard	5,433	4,703	523	204	0
Wilshire	5,200	5,200	0	0	0
DE Investment	4,945	4,945	0	0	0
T. Rowe Price	3,435	450	2,985	0	0
Chase**	3,130	1,500	530	1,100	0
Manufacturers Nat'l	4,702	4,650	47	5	0
Pacific Investment	4,000	1,100	2,900	0	0
Boston Int'l	1,987	0	0	1,987	0
PDI	1,724	1,528	0	196	0
Travelers	1,715	1,083	249	356	27
Fidelity	1,713	981	732	0	0
Northern Trust	1,702	1,365	337	0	0
Prudential Fixed Income	1,647	0	1,647	0	0
BEA**	1,570	0	1,570	0	0
Pyramis	1,500	0	1,300	0	0
First Wisconsin	1,440	140	1,300	0	0
Advanced Investment	1,423	1,412	11	0	0
Sears	1,300	1,222	0	78	0
Putnam	1,255	0	1,255	0	0
Axe Core	1,208	782	0	426	0
Chancellor Capital	1,179	1,153	0	26	0
Lehman Ark	1,034	0	1,034	0	0
Security Capital	1,150	0	831	0	199
CIGNA	914	879	35	0	0
Mitchell Hutchins	884	118	766	0	0
NCNB-Texas	817	817	0	0	0
Atlantic Portfolio	760	0	760	0	0
Nikko Capital	703	439	0	264	0
ANB Capital	605	605	0	0	0
Aetna Life**	604	490	114	0	0
Bankers	591	576	15	0	0
Capstone	500	500	0	0	0
Wayne Hummer	475	475	0	0	0
Associated Capital	359	282	77	0	0
Old Kent	350	350	0	0	0
Dimensional Asset	334	0	0	334	0
Mercer Capital	331	180	108	43	0
Bear, Stearns	325	0	325	0	0
Scott Investment	254	0	254	0	0
NBD Bancorp	277	277	0	0	0
Rushmore	254	254	0	0	0
Metropolitan Life	209	209	0	0	0
Bell Canada	764	0	764	0	0
TOTAL	342,034	234,915	83,218	35,234	1,339

3 funds won't drop Time Warner suit

By Barry B. Burr

Three public pension funds that sued Time Warner Inc., although happy the company dropped some of the most objectionable features of its original stock rights proposal, are angry it has declined to negotiate some outstanding issues.

The funds, which by suing became part of a groundswell of institutional investor opposition that forced Time Warner to retreat from its original proposal, are keeping active their lawsuit against the company and are annoyed other pension funds refused to join the suit, according to their attorney.

The continuing complaint of the funds — the $22 billion Florida Board of Administration, $2.2 billion Louisiana State Employees' Retirement System and the $3.5 billion Teachers' Retirement System of Louisiana — focuses on two issues unresolved in Time Warner's revised offering:

- Recovery from Time Warner of the some $10.1 million in market losses the three funds have sustained in aggregate on their common and preferred stock in the company from the drop in prices since management initially proposed a rights offering; and
- Failure to extend the stock rights to preferred shares.

"The reason Time Warner revised its offering proposal was because the Securities and Exchange Commission wouldn't approve the prospectus, because major pension funds complained" about the stock rights structure, said I. Walton Bader, partner with Bader & Bader, White Plains, N.Y., and attorney for the three funds.

Time Warner revised the offering, satisfying the SEC, and meanwhile negotiated a settlement in principal with lawyers who had filed class-action cases in Delaware opposing the original offering, involving about a half-dozen cases.

The three funds, the only institutional investors to sue, weren't part of those negotiations.

"If you take all these plaintiffs," Mr. Bader said, referring to the other suits, "I doubt if they have $10,000 in stock." But the suing pension funds have more than $40 million in Time Warner stock, he added.

"This is the stuff that burns the hell out of me," Mr. Bader said, because of Time Warner's failure to negotiate with the funds.

Mr. Bader said he has talked with Arthur Liman, Time Warner's lead counsel, and plans to pursue negotiations.

"We wanted (the California Public Employees Retirement System) to join us, but they wouldn't," Mr. Bader said.

"One of the biggest problems has been the apathy of pension funds to assert their rights," he said.

"If CalPERS had come into this situation we would have had more clout. Maybe Time Warner would have withdrawn their (original) offer earlier" before the price of the stock fell as much as it did, allowing the company to offer a fixed-price rights offering at a higher price than the $80 a share it ultimately has. In addition, he said with California's additional clout, Time Warner might have extended the rights to preferred stock and provided for some monetary damages to the funds, as well as to all shareholders. "People who hold the stock lost a tremendous amount of money," because its price fell precipitously because of the proposal, Mr. Bader said.

The California fund, however, hired an adviser to evaluate the matter, Providence Capital Inc., New York, and through it complained of the initial proposal to Time Warner and the SEC.

"We along with others felt the original offering was coercive and resisted it," said DeWitt Bowman, the fund's chief investment officer. "We're pleased to see Time Warner change it."

The fund "generally supported the aims of the lawsuit" by the three Southern pension funds, he said.

Mr. Bader said Time Warner offered the other plaintiffs a settlement of $2.5 million in fees and costs. The plaintiffs, in turn, offered the suing pension funds a $25,000 share in the settlement.

Mr. Bader said the funds likely would oppose such a settlement with the other plaintiffs, calling them vultures.

"We are concerned with the viability of Time Warner. We don't want to see assets erode, and that includes paying excessive fees to these people."

California's Mr. Bowman said Time Warner's willingness to change the proposal shows the influence of major shareholders on management.

The California fund holds 554,900 shares of Time Warner common stock and 23,226 shares of its Class D preferred stock. Mr. Bowman said the fund would exercise the rights for the 354,700 common shares it holds in internally managed index funds to maintain its weighting. He said its other 200,200 shares are held by active equity managers.

"It's up to their discretion whether to exercise the rights," he added.

If rights were extended to preferred stock, the three litigating funds, which hold in all 545,844 shares of Time Warner Class C and D convertible preferred stock, would have rights worth nearly $4 million, based on the rights trading on a when-issued basis as of July 16 at 7¼ each.

Of the three funds, only the Florida board owns Time Warner common stock, holding 357,000 shares.

Horace Schow II, the Florida board's general counsel, said the fund hadn't decided whether to exercise its rights to buy more stock, but nevertheless valued them because it could sell the rights.

Mr. Schow said the Florida board also has written the investment banks involved in the offering, including lead managers Merrill Lynch & Co. and Salomon Brothers Inc.

Despite the continuing dispute, Mr. Schow said, "We're rather pleased right now," about the influence of shareholders in forcing the change in the offering.

"I think this is even more dramatic than slow-moving proxy contests," he added. "This was dramatic and quick. There was a groundswell against Time Warner management's proposal. But not against the company. We want Time Warner to succeed because we own a lot of it." ■

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AT DEADLINE

Realty fund may terminate

Frank Russell Trust has made a preliminary recommendation to terminate its $385 million open-end real estate fund.

Randall P. Lert, senior vice president, said withdrawal requests exceed the fund's ability to pay within a one-year time period, required under banking law. With a termination, cash flow from the fund may be distributed on a pro-rata basis.

Russell also plans to set up a closed-end "exchange" fund into which investors may transfer unit shares from the open-end fund.

Eight real estate managers oversee the properties for Russell Trust, a manager of managers.

Interests purchased

The new Landmark Equity Partners II L.P., a partnership managed by Landmark Ventures, has bought for about $50 million 21 separate venture capital limited partnership interests owned by Harvard Management.

The deal involved 400 early and mid-stage technology companies.

Union fund taps manager

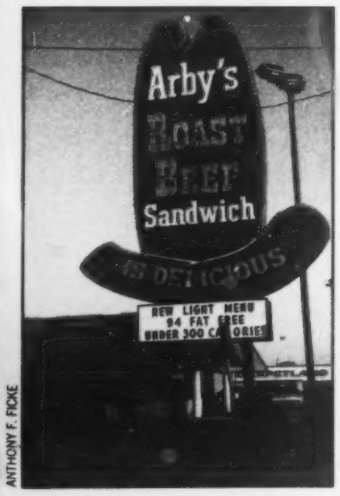
The Southern California IBEW-NECA Pension Plan, with nearly $600 million in assets, hired Trust Fund Advisors, a subsidiary of ULLICO, to manage $10 million in equities, said Claire Davis, administrator. Assets came from cash.

Custodial account assigned

Fremont Mutual Funds, owned by Bechtel Investments, has appointed Bankers Trust as custodian and fund accountant of its more than $160 million in

Continued on page 54

INSIDE



ANTHONY F. FICKE

Sizing up the returns

Some large institutional investors are exploring the possibility of getting big real estate returns through investments in small properties — namely franchise restaurant buildings. Page 3.

Mutual Benefit GIC investors unite

25 funds seek payment assurances

By Hillary Durgin

Twenty-five large corporations with multimillion-dollar investments in Mutual Benefit Life Insurance Co. GICs have united to secure regular pension payments to their pension plan participants.

Led by American Telephone & Telegraph Co., New York, the coalition wants the troubled insurer to continue making interest and benefit payments negotiated under their guaranteed investment contracts, and to honor the required cash payments due at intermediate and final maturity dates.

The companies — including Allied-Signal Inc., Bell Atlantic Corp., BellSouth Corp., General Mills Inc., Grumman Corp., NYNEX Corp. and Texas Instruments Inc. — filed their petition last week in the Superior Court of New Jersey and requested a hearing Aug. 5.

At stake are the liquidity of other GIC issuers and the security of employees' retirement funds if individuals demand their money, the brief said.

"If a large number of employees in these retirement savings plans decide to shift out of these guaranteed interest plans, it would disrupt the orderly flow of payments from other institutions . . . and have an adverse financial impact on the plans," said Dick Gray, an AT&T spokesman.

The treatment of GICs was never made clear under the rehabilitation plan announced by the New Jersey Department of Insurance, which seized Newark-based Mutual Benefit last month. The companies would like the court to clarify that the insurer will honor GIC contracts on the same terms as annuities.

Under the rehabilitation plan approved by the court, Mutual Benefit will continue to make regular benefit payments on annuities, health benefits and death benefits, but will halt temporarily cash surrenders, withdrawals and policy loans.

Of its $5.7 billion in tax-exempt assets under management as of Jan. 1, the insurer had $769 million in single or bullet GIC business and $601 million in window GICs, according to a *Pensions & Investments* survey (*P&I*, May 20). At the time the insurer was taken over, Mutual Benefit Life had total assets of $13.8 billion and liabilities of $13.5 billion.

At AT&T, Mutual Benefit GICs comprise 2.5% of the company's guaranteed interest fund, which is one of five investment options in the AT&T Long Term Savings Plan for Management Employees, Mr. Gray said. About 56,000 AT&T employees have investments in the guaranteed interest fund, the court brief said.

Grumman, Bethpage, N.Y., has invested a small amount of its $1 billion defined contribution plan in Mutual Benefit GICs. The com-

See **GICs** *on page 52*

STIF fund exposure questioned

By Marlene Givant Star

Several large pension funds for which Bankers Trust Co. lends securities will meet in the next few days to discuss the bank's use of Columbia Gas System Inc. securities in the short-term investment fund that acts as collateral backing the securities loans.

Columbia Gas, Wilmington, Del., filed for protection under Chapter 11 of the federal bankruptcy code July 31. In the weeks prior to the filing, the natural gas company had defaulted on short-term debt totaling about $50 million, placing it in default under both of its bank credit agreements.

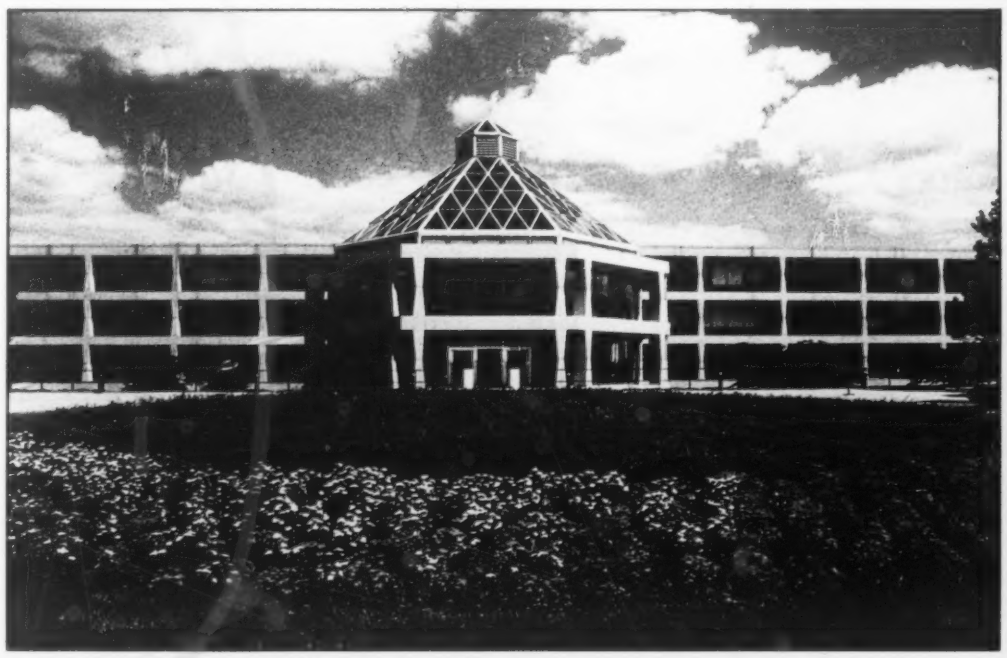
Columbia Gas represents 1% to 2% of the total cash collateral backing Bankers Trust's mammoth securities lending base of $55 billion.

The company's reorganization effectively will pit Bankers Trust as a lender against other debtholders of Columbia Gas, including the bank's securities lending clients.

The pension funds will discuss whether Bankers Trust is doing all it can to make sure Columbia Gas meets its obligations to the STIF fund and whether it was appropriate for the bank's collateral fund to include paper rated A2P2, Columbia Gas's commercial paper rating prior to the default.

"While it's all well and good for A2P2 paper to be in the Super STIF (more aggressive) fund, they did not tell us it was in the securities lending STIF fund. I found that annoying. We're seeing what can be done," said John Long, director of investments of the $1.4

See **Utility** *on page 53*



IBM's pension fund may take the unusual step of exchanging properties for REIT shares.

Buildings-for-stock swap eyed

IBM tries to boost real estate liquidity

By Steve Hemmerick

STAMFORD, Conn. — In a pace-setting move, the $22 billion IBM Corp. pension fund is seeking to exchange some of its smaller real estate properties for shares in real estate investment trusts.

The swap would improve the liquidity of a portion of the IBM fund's real estate portfolio, said Kyle Escherich, an analyst with the pension fund.

Many of the nation's pension funds have found a clear inability to exchange their real estate for cash. Unlike actual real estate properties, many shares of REITS are publicly traded and are often easily sold at the market price.

Paul Saint-Pierre, president of Pension Realty Advisors Inc., a real estate consulting firm in San Francisco, said he "conservatively" estimates pension funds in open-end commingled real estate funds are in redemption waiting-list lines trying to cash in more than $2 billion in fund shares.

The $2 billion is nearly 10% of the aggregate outstanding asset value of the nation's 38 open-end real estate funds.

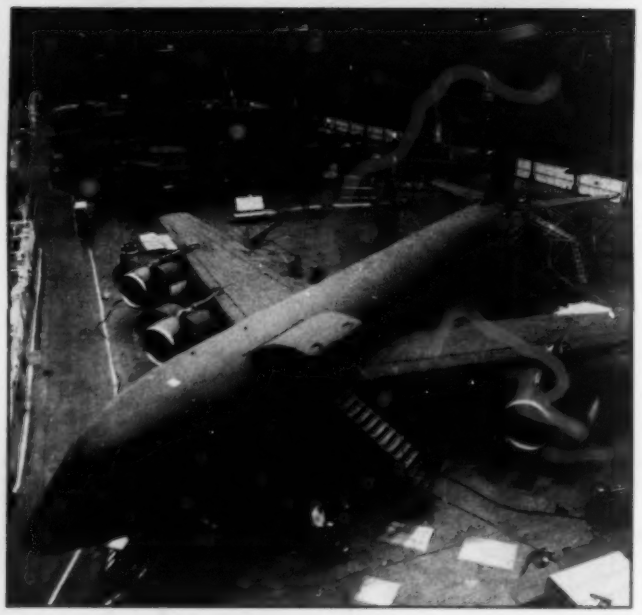
"Real estate liquidity is a growing problem for the institutional investment markets. Within 10 years, industry liquidity may become a crisis unless investors and investment managers begin now to implement and support long-term solutions," said Mr. Saint-Pierre.

The IBM offer to REITs is one possible solution. Mr. Escherich said the offer is only for a small portion of the pension fund's properties. The properties considered for an exchange for REIT shares are valued at $5 million to $15 million each.

"We do believe that on these small properties, the REITS can do a better job at managing them. I wouldn't say though that our properties are woefully undermanaged. We just feel that for

See **IBM** *on page 54*

NEWS DIGEST



Boeing, a major defense contractor, will face a shareholder resolution in 1992 asking about its foreign military sales despite the measure's defeat at this year's annual meeting. Page 38.

The New York City Teachers fund overhauls its manager roster, adding five firms and dropping three. Page 4

Nomura Capital is responding to concerns of clients regarding the Japanese brokerage scandal. Page 6

Age-based profit-sharing plans are seeing renewed interest as a result of an IRS proposal. Page 8.

An increase in high-yield bond defaults mean potentially lucrative returns. Page 32.

SPECIAL REPORT: WORLD'S LARGEST FUNDS

The 300 largest pension funds top $2.4 trillion, and some experts think many of the funds will be shifting to a higher equity exposure. Page 19.

INTERNATIONAL

Boosting national economic health could be one by-product of Latin American countries' efforts to start pension systems. Page 3.

Canadian investors are seeking performance measurement standards. Page 8.

REAL ESTATE

New York University's conference on pension fund realty investing finds participants bemoaning the current state of the industry. Page 30.

A structured mortgage deal is restructured, making the properties involved irrelevant to investors. Page 36.

The financial health and stability of real estate management firms is of increasing importance. Page 44.

★★★★★★★★

The "Money Movers" section has been renamed "Hirings" and now includes the appointment of investment management consultants. Page 48.

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Bank gets favorable ruling

Fiduciaries now must share responsibility for losses

By Joel Chernoff

NEW YORK — In a groundbreaking decision, a federal appeals court has ruled a bank trustee can force other ERISA fiduciaries to pay their fair share for investment losses stemming from a fiduciary breach.

The July 25 ruling by the 2nd U.S. Circuit Court of Appeals means a single institutional fiduciary no longer will get stuck holding the bag for the entire loss if there are other responsible parties. Previous rulings have said a fiduciary had no right under the 1974 Employee Retirement Income Security Act to force other fiduciaries to contribute, even if they played a larger role in the violation but were not named in the original lawsuit.

The problem is particularly troublesome for financially sound institutions that are considered to be "deep pockets" by plaintiffs.

Sometimes participants are reluctant to sue a fiduciary with which they have a continuing relationship, such as their employer or labor union, and instead sue an outside fiduciary, such as the trustee, money manager or other service provider.

The ruling also affects sharing responsibility among multiple defendants named in fiduciary litigation. ERISA's doctrine of joint and several liability means that all defendants can be held liable for the entire loss. Under the new ruling, a deep-pocket defendant would be able to try to recover part or all of its losses from other plan fiduciaries.

The decision does not, however, change the amount of money that can be recovered by a pension plan and its participants, just how that burden is distributed.

Ultimately, the issue might have to be decided by the U.S. Supreme Court, as the 2nd Circuit ruling has caused a split among judicial jurisdictions.

The decision was hailed by ERISA attorneys.

"I think that it restores a balance among plan fiduciaries that really always existed under state law but seemed not to exist under ERISA," said William Hanrahan, a partner with the Washington law firm of Groom & Nordberg, which represented Scvran Bank/Maryland, the bank trustee in the litigation.

The decision "prevents someone's minor mistake for accounting for 100% of the bill," Mr. Hanrahan said.

The case involved a small defined benefit plan sponsored by Fairway Spring Co. Inc., Horseheads, N.Y. The plan, created in 1981, originally hired Glen Dawson, president of Chesapeake Pension Consultants Inc., Annapolis, Md., as trustee. He invested the plan assets in various instruments, including equipment leasing arrangements, real estate partnerships and mortgage-backed notes.

See **Ruling** *on page 55*

Institutions left out in the cold

GAMCO fighting change in bylaws

By Marlene Givant Star

GAMCO Investors Inc., the largest institutional shareholder of Century Telephone Enterprises Inc., is fighting to override a bylaw change that effectively disenfranchises most of Century's institutional investors.

The amendment was approved at the company's May 30 annual meeting. As a result, shares of voting stock that have been beneficially owned continuously since before May 30, 1987 — including the stake held by the company's benefit plans — will have 10 votes per share. All other shares — including those held by most of the company's institutional investors — will have one vote per share.

GAMCO, controlled by Mario J. Gabelli, the well-known value stock investor, filed suit against Century and certain of its directors seeking to prevent the company from implementing the change. GAMCO and other Gabelli-owned entities hold an aggregate 14.67% of the outstanding Century common stock.

Mario Gabelli thinks Century Telephone's attempt to amend its bylaws "stinks."

"We're not a gadfly. This is the first time we've gone this far because it stinks," said Mr. Gabelli.

Although GAMCO — with 4,531,973 shares — has almost the same number of shares as the company's employee stock ownership plans, the ESOPs represent 41.7% of the company's voting power, while GAMCO has only 4.8% of the vote.

GAMCO's complaint alleges the proxy statement disclosure concerning the amendment was false and misleading, that it failed to disclose that "the true purpose of the amendment is to entrench current management and to bar long-term shareholders from receiving voting parity with the company's employee benefit plans."

GAMCO's suit also charges the proxy material "fails to include an opinion from an independent financial adviser as to the effect of the amendment on Century's common stock or an explanation as to why no such opinion was obtained and that it fails to ade-

See **GAMCO** *on page 49*

Harvard weighs 5 bank deals

By Terry Williams

CAMBRIDGE, Mass. — The Harvard University endowment is considering investing in one or more of five troubled New Hampshire banks.

The five banks are the five largest in New Hampshire. The Federal Deposit Insurance Corp. has sent out information packages on the banks to prospective bidders, and has set an early September deadline to submit bids, according to Scott Sperling, managing partner with The Aeneas Group.

Aeneas is the alternative investment arm of Harvard Management Corp., which manages the $5 billion endowment for the university.

"We will probably look at a whole range of opportunities in the financial services area," said Mr. Sperling. "This may or may not be something we will bid on."

Investments in failed banks are attractive because regulatory issues and the required due diligence present a high barrier to entry for many investors, said Mr. Sperling.

The five banks in question are Amoskeag Bank Shares, BankEast Corp., Dartmouth Bancorp., New Hampshire Savings Bank and Numerica Financial Corp.

Although all five remain open, they are in poor financial shape, according to Jim Moynihan, banking analyst with Advest Group Inc., Boston.

The capital ratios of the banks — which measure a bank's capital to assets — are low, many of them negative. "For all intents and purposes, we are looking at five companies that are virtually brain dead," he said.

"They are open banks now, but they will be closed-bank transactions," Mr. Moynihan said.

In a closed-bank transaction, the successful bidders are awarded the bank and they bring in a new management team to operate it, said Mr. Moynihan. The federal government takes control of the non-performing loans.

In comparison, in an open-bank assisted deal, management remains in place and seeks a cash infusion to salvage the company. It is the least expensive to taxpayers of the two transactions.

A spokesman with the FDIC in Washington declined to comment.

A. Roland Roberge, commissioner of New Hampshire's banking department, also declined to

See **Harvard** *on page 53*

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N.Y.C. Teachers revamps portfolio

NEW YORK — Trustees of the $5.2 billion New York City Teachers Variable Fund invested $670 million with five new managers and allocated $106 million to three existing managers.

The actions complete a reshuffling of investment advisers for the fund's Variable Annuity Program A. The fund also released three advisers and two had accounts reduced.

An equity employee-contributory fund, Variable Annuity Program A, was restructured because the trustees wanted a different style of management, according to Donald Miller, executive director.

The elimination of the managers wasn't so much performance related as it was a portfolio repositioning to reflect the new style, he said. Although Mr. Miller didn't elaborate on the style changes, one manager said the fund sought to increase the participation of minority- and women-owned firms.

At least two of the new firms fit that criteria — Beal Investment Co., which was hired to run $60 million, and Sturdivant & Co. Inc., which was given $10 million.

In addition, Fidelity Management Trust Co., Enhanced Investment Technologies Inc. and Roll and Ross Asset Management Corp. each received $200 million. Current managers, Goldman Sachs Asset Management, John A Levin & Co. Inc. and Bankers Trust Co. received respectively, an additional $79 million, $4 million and $23 million.

Eliminated as fund managers were Concord Capital Management, which managed $154 million; PRIFORM Investment Management, which oversaw $164 million; and Wells Fargo Nikko Investment Advisors, which managed $408 million.

Wells Fargo Nikko still is an investment manager in other capacities for the New York City Teachers Variable Fund.

Also, $35 million was transferred from Sound Shore Management Inc. and $15 million was taken from MIDCO Investors; both remain advisers to the retirement board.

Rogers Casey & Associates, Darien, Conn., aided the trustees. ■

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CORRECTIONS & CLARIFICATIONS

- In a July 22 story on actuarial fees, the amount of a **TPF&C** bid for services was reported incorrectly. The bid was less than the previous year's charges, as reported, but was less than $230,000.
- The following profile was omitted inadvertently from the May 20 directory of money managers.

Bartlett & Co.
36 E. Fourth St., Cincinnati, Ohio 45202; (513) 621-4612

Total assets managed	$1,736,000,000
Total discretionary	$1,616,000,000
Total tax-exempt assets	$518,000,000
Total discretionary tax-exempt	$500,000,000
Mortgage assets	$6,000,000
International equity assets	$43,000,000
International fixed-income	$2,000,000
Mortgage-backed assets	$25,000,000
Tax-exempt clients	167
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	15
Size of research staff	5

Bartlett & Co. is an active equity, active fixed-income, balanced, real estate, active international/global equity and cash manager.

Its equity approach is value-oriented, risk-averse, disciplined and primarily bottom-up. Purchases are made at prices that represent substantial discounts from determined intrinsic values. Sales are made at predetermined target prices.

Its fixed-income approach also is value-oriented, seeking securities that are undervalued based on analysis of the yield curve, sector spreads and credit-quality spreads.

In real estate, it funds limited partnerships that purchase properties below their replacement value.

Options and financial futures are used.

The asset mix Jan. 1 was 46% stocks, 38% bonds, 10% cash, 1% mortgages and 5% mortgage-backed securities.

Donald S. Schmidt is chief investment officer; Kathy Lang-Albright is client contact.

PEOPLE

Broker targets projects for kids through rebates

■ "We don't just want to be known as a minority firm."

Those words of Christopher Gardner, managing general partner in the broker-dealer firm Gardner Rich & Co., Chicago, have proved true. The firm has distinguished itself by "rebating" 10% of its commission from public fund money managers back to the plan sponsor with the stipulation the rebate be used for schools for special or handicapped children or urban libraries.

"We've gotten opportunities from public funds. They have allowed us to grow our business," Mr. Gardner said.

The opportunities afforded Mr. Gardner are ones he knows better than to pass up. His rebates are, in their own way, intended to help children see opportunities when they present themselves.

"All I ever had were public libraries and public schools, and even at times, public aid," he said of his childhood. Years later, times weren't always so bright. "Ten years ago, I was homeless with a 14-month-old baby."

But perseverance, a few breaks and hard work helped him get established with Bear Stearns in San Francisco and then New York. And for the past four years, he has had his own firm in Chicago. He is thankful. "None of this had to happen," he said. "But with equal opportunity comes equal responsibility to give something back to the community."

Schools and libraries in Chicago, Southern California and, most recently, Kansas City have been the beneficiaries. "In some cases it's not a lot of money, but when you put that money in the hands of a school teacher, it's $2,000 they can spend for the students that they hadn't had."

"The best thing is that the kids know you when you visit," he said. And he thinks the children understand the intended lesson. The walls of his office are decorated with thank you letters and artwork from the children.

MICHAEL A. MARCOTTE

Christopher Gardner started his firm's rebate program because "with equal opportunity comes equal responsibility."

ASSOCIATIONS

Lacking support, NISF fades away

■ The National Investment Sponsor Federation is dormant, and there are no plans to revive it, said Charles Stephens, president of the association.

Mr. Stephens said the group's inactivity is due to lack of support by members, who are faced with restricted travel budgets and limited resources. Members in the NISF came from the numerous regional plan sponsor groups.

He disputed the perception that the Council on Investment of Employee Benefit Assets is filling the NISF's role. The NISF, he said, was intended to have open membership and be primarily an educational and information-sharing entity, not a lobbying group, while his understanding of CIEBA is that it has a limited number of primary memberships and takes lobbying positions.

Mr. Stephens is director of investors for the UMWA Health & Retirement Funds, Washington.

TOM REED

NISF President Charles Stephens said there are no plans to revive the association.

FINANCING

Mezzanine fund nabs $70 million

■ The Marlborough Capital Investment Fund raised $70 million from institutional investors.

The mezzanine fund, one of the few to raise any money during the past two years, will provide financing with equity participations to established midsize companies. Investments usually will be made in connection with expansion or acquisition financings, buy-outs or recapitalizations.

The fund is run by Marlborough Capital Advisors, an arm of The New England.

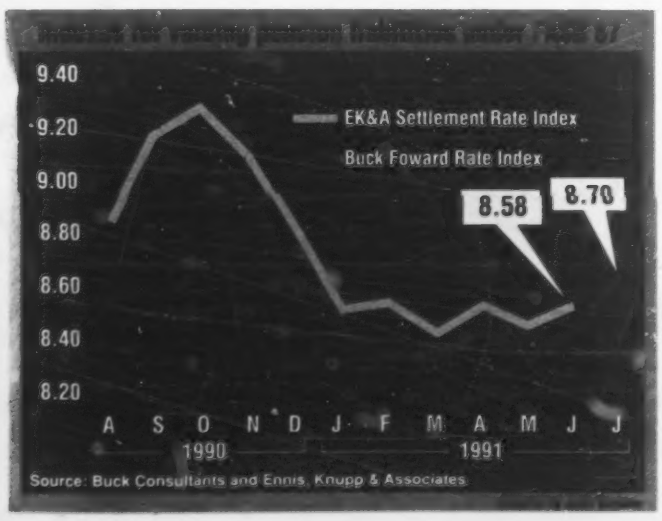
REAL ESTATE

Professor emphasizes 'homework'

■ Some real estate managers that claim to specialize in workouts or doctoring troubled real estate portfolios caused or contributed to the original problems, said Paul D. Lapides, professor of real estate development at Columbia University, New York.

While there are talented specialists in portfolio workouts, the demand now exceeds supply. Some firms offering workout services are interested only in "enormous fees" and paying little attention to development of skilled personnel or resources, he said.

"Even some of the very large firms don't have the skills and resources necessary to provide these services," he warned, cautioning anyone hiring a workout firm to "do your homework" first.



INTERNATIONAL

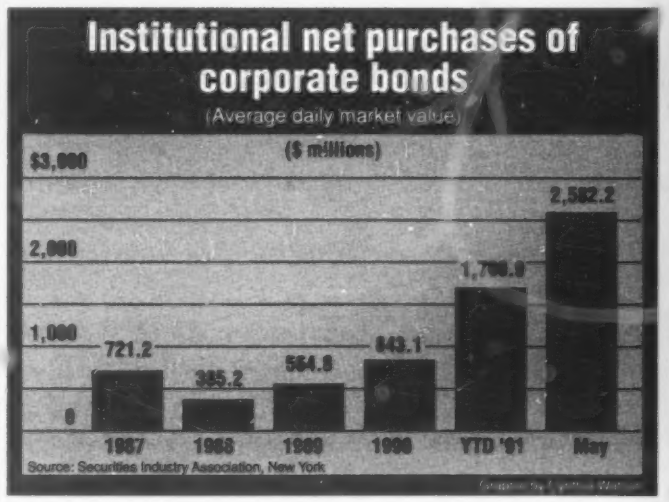
Dividends boost Japan weighting

■ Reinvestment of dividends has contributed to Japan's heavy weighting in the Morgan Stanley Capital International Europe Australia Far East Index, according to a study by Boston International Advisors Inc.

Construction of the index assumes dividend income is reinvested into each security in proportion to capitalization weights, says the study by David A. Umstead, managing director of Boston International. This assumption, however, means dividend income flows out of high-yielding markets to low-yielding ones. Japan has the lowest yield of any market in the index: 0.8% in 1990.

During the EAFE index's 21-year history, Japan's weight has increased 35.8 percentage points, to 50.4% at the end of 1990, according to the study. Of the increase, 40% has been due to reallocation of dividend income.

It seems illogical for a multimarket, indexed portfolio to require continual, significant reallocation from some markets to others, Mr. Umstead's study said: "Tax-exempt investors are presumably indifferent between capital gains and dividend income. Why then should there be a systematic allocation away from one source of return toward another?"



INVESTING

Corporate bonds attract investors

■ Institutional investors are snapping up corporate bonds like free candy this year and demand is expected to continue in the next several weeks barring an unexpected decline in interest rates, according to a report from the Securities Industry Association.

Institutional net purchases rose to an average $2.6 billion daily in May, from $1.6 billion daily average in April. In the year through May 31, the daily average rose to a record $1.7 billion, nearly twice the previous peak of $859.7 million daily average for all of 1986.

The increased investor appetite stems from two factors: New issuance of corporate bonds is up substantially and the yields on long-term bonds have remained fairly steady while yields on short-term securities have nosedived, according to the report, which looks at activity through the end of May.

In the year through May, total issuance of corporate bonds amounted to $182 billion, including asset-backed securities, or about $438 billion at an annualized rate, compared to only $291 billion issued in all of 1990.

The higher numbers also reflect changes last year in the Depository Trust Co.'s data collection system for medium-term notes, increasing cumulative corporate bond transactions reported.

The average value of institutional corporate bond trading in May reached $22.6 billion daily, compared with $22.3 billion in April and second only to February's record $23.1 billion.

Through the first five months, the daily value averaged a record $21.7 billion, up 38% from the previous peak of $15.7 billion daily average set for all of 1990.

Top 300 hit $2.4 trillion

Worldwide shift toward equities seen for many funds

By Margaret Price

At the end of 1990, the world's 300 largest pension funds had assets of about $2.4 trillion, a survey by *Pensions & Investments* and InterSec Research Corp., Stamford, Conn., reveals.

Of the largest 25 funds, with assets totaling more than $937 billion, 16 were U.S. funds, with three from Japan, two each from the United Kingdom and the Netherlands, and one each from Sweden and Singapore.

Data show investment styles of non-U.S. funds differ widely from those of U.S. funds on average. Although U.K. pension funds show a great propensity for equity investing, many other countries' funds still cling heavily to fixed income. Indeed, the $93.7 billion Algemeen Burgerlijk Pensioenfonds in Heerlen, the Netherlands — the world's largest pension fund — reported an 88% exposure to fixed income at year-end 1990. (See profile on page 20.)

The typical U.K. pension fund at the end of 1990 invested 72% in domestic and foreign equities, 15% in U.K. and overseas bonds and cash, 3% in indexed-linked bonds and 9% in real estate, according to the WM Co., Edinburgh, Scotland. As of Sept. 30, the top 200 U.S. defined benefit plans had 43.4% in stocks, 39.3% in fixed income, 7.4% in cash, 4.9% in equity real estate and 5% in other categories (*P&I*, Jan. 21).

But changes loom, particularly for funds that now heavily embrace fixed-income and, generally, domestic investing. Experts say that, increasingly, social, economic and political forces — ranging from the aging of the population to some governments' desires to shed some of their weighty pension obligations — are causing some funds to rethink their allocations.

Gordon Bagot, the WM Co.'s consultancy director, could see private Dutch funds, that averaged about 20% in equities last year, raising that level to about 50% by the end of the decade. And, among other countries, "Japan could be among those switching more heavily into equities," he said.

In Canada, pension funds are eagerly awaiting the green light to boost their foreign exposure — now capped at 10% of assets. Pending legislation would gradually lift allowable foreign investing to 20% of funds' book value of assets in 1994 (*P&I*, June 24.)

In continental Europe, however, the traditional investing conservatism won't wilt quickly. Few if any consultants expect these funds to replicate the level of equity investing British funds embrace. "Two things are holding back continental European funds: laws that still place restrictions on equities holdings and the fact that even now, funds often aren't investing up to their allowable limits," noted David Gallagher, vice president in the London office of InterSec Research.

WM Co.'s Gordon Bagot expects Dutch and Japanese funds to raise stock exposures.

InterSec projects major growth for all pension funds' foreign investing. InterSec foresees a rise to $734 billion in non-domestic investments, or 11% of assets, in 1995 — up from $347 billion or 8% of assets in 1990. InterSec expects the largest growth rate to come from U.S. funds, which should post a rise in 1995 to $252 billion in foreign assets, or 8% of total holdings, up from $93 billion, 4% of assets, in 1990.

Continental European funds' non-domestic holdings should rise to $104 billion, or 10% of assets in 1995, from $48 billion, or 7% of assets in 1990, InterSec said.

Japanese funds should have 12% of assets, or $128 billion invested abroad in 1995, up from 8% or $48 billion last year. But the already internationally invested British funds, with 26% of total assets overseas last year, should see foreign holdings inch down to 25% in 1995, even though total foreign assets will be $149 billion, up from $125 billion in 1990, InterSec projects.

Many experts expect British funds to remain wedded to equities — though some greater interest in bonds, especially non-U.K. bonds, has been emerging. "There's a substantial debate (in Britain) about whether or not (the current economic climate is) a traditional economic recovery," said John Kelly, a director and head of U.K. equities with BZW Investment Management, London. "If this is seen as a traditional recovery, there should be further moves into equities" by British funds. If not, bonds' appeal would brighten further, he noted.

BZW is the investment manager of Barclays Bank's $8.6 billion pension fund. Last year, that fund saw a substantial drop in its foreign equity holdings to 20.2% from 29.7% a year earlier. Mr. Kelly cited a number of factors for the change, especially the desire to take profits on foreign holdings to bolster U.K. equities investments, which totaled 53.4% at year's end. Mr. Kelly said certain political and economic events in the spring of 1990 made London's market "seem cheap on a global basis."

British Petroleum's $7.9 billion pension fund is now 70% in domestic and foreign equities — up from 67% at year's end. J.W. Martin, the fund's head of investments, said he'd like the fund to advance to a 75% equity exposure at some point. Citing equities' historical outperformance compared with bonds, Mr. Martin said, "we think that with more money in the bank, we'll be better able to meet our liabilities."

To him, bonds are a "poisoned chalice."

"History is littered with people who went into the bond market when they thought it was a good idea, over a six- to nine-month period. Five years later, they'd regretted it over most" of that time.

Last year, however, British Rail Pension Trustee Co. Ltd in London, with $13.124 billion in assets, found an opportunity with U.K. index-linked gilts for the closed, mature schemes it operates. "The purpose was to reduce the risk of schemes being unable to meet pension commitments at the turn of the century and beyond," explained David Adams, chief executive.

Using cash, the fund bought index-linked bonds with a yield to maturity of 4.25% to 4.5% above inflation, which was slightly higher than the inflation-plus-4% the fund's actuary had assumed was adequate.

Of the fund's total 14% U.K. bond exposure at year's end, 8.5% represented index-linked gilts. A year earlier, these index-linked investments represented about 2% of assets, Mr. Adams said.

Some Japanese pension funds took advantage of the change in pension law last year that allowed them to hire as investment managers companies other than trust banks and insurance companies.

The $8.8 billion Mutual Aid Association of Agriculture, Forestry and Fishery Corporation Personnel, for example, now uses 11 investment management firms other than banks and insurance companies. The $44 billion Japan Mutual Aid Association of Public School Teachers uses 14 investment management firms other than banks and insurance companies, including two non-Japanese firms and one joint venture. And the $12.8 billion Pension Fund Association fund uses 16 non-bank, non-insurance company managers including three non-Japanese firms. ■

In this issue's special report, *Pensions & Investments* takes a look at the largest pension funds in the world.

First we rank (in a joint project with InterSec Research Corp., Stamford, Conn.) the 300 largest pension funds in the world, and then we profile 28 of the largest non-U.S. pension funds.

P&I's international reporters — Margaret Price and Trudy Ring — compiled the information on the 28 pension funds from a variety of sources.

InterSec's listing was the starting point. Pension executives then were asked to complete a questionnaire, used to write the profiles that begin on page 20.

Additional information was gathered through the assistance of the Japan Bond Research Institute, Tokyo.

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P&I/InterSec World 300 (U.S. $ millions)

1.	Algemeen Burgerlijk	The Netherlands	93,710
2.	TIAA-CREF	U.S.	83,100
3.	Allmanna Pension	Sweden	70,990
4.	Pension Welfare Service	Japan	67,919
5.	California Employees	U.S.	54,000
6.	Public School Teachers	Japan	44,000
7.	New York State & Local	U.S.	43,737
8.	NYC Emply./Teachers	U.S.	40,763
9.	AT&T	U.S.	38,876
10.	General Motors	U.S.	36,300
11.	Nat'l Gov't Employees	Japan	34,114
12.	California Teachers	U.S.	30,140
13.	General Electric	U.S.	27,108
14.	New York Teachers	U.S.	26,689
15.	New Jersey	U.S.	26,609
16.	British Coal	U.K.	25,090
17.	IBM	U.S.	25,000
18.	Texas Teachers	U.S.	23,734
19.	Central Provident Fund	Singapore	23,500
20.	PGGM	The Netherlands	22,176
21.	British Telecom	U.K.	20,858
22.	Ford Motor	U.S.	20,800
23.	Ohio Employees	U.S.	20,595
24.	Florida State	U.S.	19,268
25.	Wisconsin State	U.S.	18,482
26.	Ohio State Teachers	U.S.	18,200
27.	Du Pont	U.S.	17,728
28.	North Carolina	U.S.	17,289
29.	Pa. Public Schools	U.S.	17,268
30.	State of Michigan	U.S.	17,268
31.	Ontario Teachers	Canada	17,242
32.	Employees Provident	Malaysia	17,100
33.	Electricity Supply	U.K.	15,630
34.	Caisse de Depot	Canada	14,820
35.	Local Public Service	Japan	14,544
36.	NYNEX	U.S.	14,383
37.	BellSouth	U.S.	14,125
38.	Bell Atlantic	U.S.	13,943
39.	Post Office	U.K.	13,780
40.	ATP	Denmark	13,359
41.	Ameritech	U.S.	13,241
42.	British Railways	U.K.	13,124
43.	NTT Mutual Aid	Japan	12,894
44.	Washington State	U.S.	12,839
45.	Pension Fund Assoc.	Japan	12,786
46.	University of California	U.S.	12,471
47.	Private School Teachers	Japan	12,161
48.	Minnesota State	U.S.	12,098
49.	GTE	U.S.	11,825
50.	Boeing	U.S.	11,600
51.	B.C. Superannuation	Canada	11,055
52.	Pacific Telesis	U.S.	10,896
53.	Maryland State	U.S.	10,761
54.	Ontario Municipal	Canada	10,750
55.	Virginia Retirement	U.S.	10,687
56.	Philips	The Netherlands	10,490
57.	Los Angeles County	U.S.	10,362
58.	Prefectural Gov't	Japan	10,276
59.	British Gas	U.K.	10,110
60.	Oregon Employes	U.S.	9,900
61.	Georgia Teachers	U.S.	9,871
62.	Rockwell Int'l	U.S.	9,715
63.	Eidgenossische Vers.	Switzerland	9,710
64.	Nat'l Police Personnel	Japan	9,595
65.	Pa. Employes	U.S.	9,485
66.	Central Teamsters	U.S.	9,398
67.	Western Teamsters	U.S.	9,292
68.	Colorado Employees	U.S.	9,195
69.	Universities Superann.	U.K.	9,120
70.	Eastman Kodak	U.S.	9,000
71.	Alabama Retirement	U.S.	8,827
72.	Agricultural Forest/Fish	Japan	8,817
73.	USX	U.S.	8,750
74.	Barclays Bank	U.K.	8,623
75.	U.N. Joint Staff	U.S.	8,591
76.	Shell	U.K.	8,310
77.	Southwestern Bell	U.S.	8,303
78.	Imperial Chemical	U.K.	8,299
79.	Illinois Teachers	U.S.	8,175
80.	Nat'l Westminster Bank	U.K.	8,160
81.	Tenn. Consolidated	U.S.	8,148
82.	U S WEST	U.S.	7,998
83.	Lockheed	U.S.	7,963
84.	United Technologies	U.S.	7,960
85.	British Petroleum	U.K.	7,913
86.	Connecticut Trust Funds	U.S.	7,902
87.	Exxon	U.S.	7,838
88.	New South Wales Super.	Australia	7,763
89.	S. Carolina Retirement	U.S.	7,728
90.	British Steel	U.K.	7,510
91.	Shell Oil	U.S.	7,501
92.	Deutscher Bank	Germany	7,430
93.	Shell	The Netherlands	7,350
94.	Arizona State	U.S.	7,234
95.	Sears, Roebuck	U.S.	7,186
96.	Chevron	U.S.	7,157
97.	McDonnell Douglas	U.S.	7,023
98.	Philip Morris	U.S.	6,963
99.	Federal Retirement	U.S.	6,890
100.	Ontario Public Service	Canada	6,730
101.	British Airways	U.K.	6,710
102.	Bouwnijverheid BPF	The Netherlands	6,700
103.	Mass. Teachers/Emply.	U.S.	6,650
104.	Hughes Aircraft	U.S.	6,300

Continued on page 27

GREAT PERFORMANCE IS ROOTED IN GREAT PHILOSOPHY

"E = mc²"

Albert Einstein, (1879 - 1955)

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CHEAPNESS + IMPROVING FUNDAMENTALS = ATTRACTIVE STOCKS

Mutual Aid Association of Agriculture, Forestry and Fishery Corporation Personnel

(U.S. $ millions)

Total pension assets 8,817

TOKYO — The Mutual Aid Association of Agriculture, Forestry and Fishery Corporation Personnel had assets of $8.817 billion as of March 31, 1990, the most recent date for which information was available.

The fund uses the following external managers: IBJ Investment, Nomura Investment, Yamaichi Capital Asset, Kankaku Investment, Nissei Capital, NKU Investment, LTCB Investment, Daiwa International, Nikko International, New Japan International and Tokio Marine, as well as domestic banks and insurance companies.

The information was supplied by the Japan Bond Research Institute.

Algemeen Burgerlijk Pensioenfonds

(U.S. $ millions)

Total pension assets	93,710
U.S. stocks	415
U.S. real estate	593
Internally managed assets	91,836
Indexed assets:	
Foreign stocks	700
Asset mix:	
Domestic stocks	3%
Domestic bonds	88%
Foreign stocks	2%
Domestic real estate	6%
Foreign real estate	1%

HEERLEN, Netherlands — Algemeen Burgerlijk Pensioenfonds had assets of $93.71 billion as of Dec. 31. Of that, 5% was in stocks, 88% in bonds and 7% in real estate.

Asset allocation and money manager selection are conducted in-house.

Jan Willen Goslings, member of the executive board, is a key person overseeing the pension fund.

Allmanna Pensionsfonden (1st, 2nd and 3rd Boards)

(U.S. $ millions)

Total pension assets	70,990
Internally managed assets	70,990
Asset mix:	
Domestic fixed income	85%
Real estate	2%
Loans	13%

STOCKHOLM, Sweden — Allmanna Pensionsfonden (1st, 2nd and 3rd Boards), the national Swedish pension fund, had assets of $70.99 billion as of Dec. 31. Of that, 85% was in fixed income, 2% in real estate and 13% in loans. The fund is managed internally.

Key personnel overseeing the pension fund are Carl Johan Aberg, president; Lars Aberg, head of fixed-income investing; Kaj Isaksson, head of lending activities; and Bo Boestad, head of real estate investing.

Arbejmarkedets Tillaegspension

(U.S. $ millions)

Total pension assets	13,359
Internally managed assets	13,359
Asset mix:	
Domestic stocks	12.8%
Domestic bonds	82.8%
Cash equivalents	0.1%
Foreign stocks	0.2%
Foreign bonds	0.3%
Domestic real estate	2.9%
Foreign real estate	0.1%
Loans	0.8%

HILLEROD, Denmark — Arbejmarkedets Tillaegspension had assets of $13.359 billion as of Dec. 31.

Of that, 13% was in stocks, 83.1% in bonds, 0.1% in cash, 3% in real estate and 0.8% in loans.

The key person overseeing the pension fund is Rolf Norstrand, general manager-finance and investments.

Barclays Bank (1964) Pension Fund

(U.S. $ millions)

Total pension assets	8,62
U.S. stocks	52
U.S. real estate	24
Internally managed assets	8,62
Indexed assets:	
Domestic stocks	3,14
Foreign stocks	394
Asset mix:	
Domestic stocks	53.4%
Domestic bonds	5.9%
Cash equivalents	6.1%
Foreign stocks	20.2%
Foreign bonds	1.2%
Domestic real estate	10.4%
Foreign real estate	2.8%

LONDON — Barclays Bank (1964) Pension Fund had assets of $8.623 billion as of Dec. 31. Of that, 73.6% was in stocks, 7.1% in bonds, 6.1% in cash, and 13.2% in real estate.

The fund is managed by BZW Investment Management, a wholly owned subsidiary of Barclays Bank PLC.

Key personnel overseeing the pension fund are Michael Mawdsley, pensions manager, and M. Wolfgang, director, BZW, investment manager.

Opportunities in post-1992 Europe will be discussed Oct. 28.

NOT JUST A SERVICE. A PARTNERSHIP.

In Global Custody few things are more important than service.

At Boston Safe Deposit and Trust Company,* we give the idea of service its ultimate expression: offering our clients a partnership between professionals.

This allows us to consistently offer a high degree of involvement in and understanding of our clients' specific requirements.

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GE Investments

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British Coal Pension Funds

	(U.S. $ millions)
Total pension assets	25,090
U.S. stocks	965
U.S. real estate	77
Internally managed assets	25,090
Asset mix:	
Domestic stocks	52%
Domestic bonds	8%
Cash equivalents	5%
Foreign stocks	17%
Domestic real estate	13%
Foreign real estate	1%
Venture capital	4%

LONDON — The British Coal Pension Funds had assets of $25.09 billion as of Dec. 31. Of that, 69% was in stocks, 8% in bonds, 5% in cash, 14% in real estate and 4% in venture capital.

The fund is managed by an in-house investment group, CIN Management Ltd.

Key personnel overseeing the pension fund, all with CIN Management, are Paul M. Whitney, chief executive; Barry Southcott, managing director-marketable securities; Robert Juddery, managing director-property; and Robin Hall, managing director-venture capital.

Superannuation Commission for the Province of British Columbia

	(U.S. $ millions)
Total pension assets	11,055
Internally managed assets	10,996
Indexed assets:	
Domestic stocks	301

VICTORIA, British Columbia — The Superannuation Commission for the Province of British Columbia had assets of $11.055 billion as of Dec. 31.

The commission oversees eight separate funds. The $3.4 billion Public Service Superannuation Fund had 1% in stocks, 70% in bonds and 29% in cash. The $3.6 billion Municipal Superannuation Fund had 68% in bonds and 32% in cash. The $2.7 billion Teachers' Pension Fund had 15% in stocks, 53% in bonds and 32% in cash. The $141 million Workers' Compensation Board Pension Fund had 83% in bonds and 17% in cash. The $200 million Rail Pension Fund had 21% in stocks, 52% in bonds and 27% in cash. The $734 million Hydro Pension Fund had 6% in stocks, 61% in bonds and 33% in cash. The $2.7 million Members of the Legislative Assembly Pension Fund had 27% in bonds and 73% in cash. The $260 million College Pension Fund had 14% in stocks, 51% in bonds and 35% in cash.

All funds are managed entirely in-house except British Columbia Hydro, which has $675 million managed internally and uses Royal Trust as external manager for the remainder.

Dan Russell, portfolio manager-bonds, and Keith Watson, portfolio manager-equities, are key personnel overseeing all but the Workers' Compensation Board fund. Paul Lee, controller, oversees that fund.

British Gas Pension Funds

	(U.S. $ millions)
Total pension assets	10,110
U.S. stocks	520
U.S. real estate	94
Internally managed assets	9,120
Indexed assets:	
Domestic stocks	108
Asset mix:	
Domestic stocks	55.8%
Domestic bonds	6.7%
Cash equivalents	6.2%
Foreign stocks	16.3%
Foreign bonds	2.1%
Domestic real estate	8.4%
Foreign real estate	1.2%
Index-linked bonds	3.3%

LONDON — British Gas Pension Funds had assets of $10.11 billion as of Dec. 31. Of that, 72.1% was in stocks, 8.8% in bonds, 6.2% in cash, 9.6% in real estate and 3.3% in index-linked bonds.

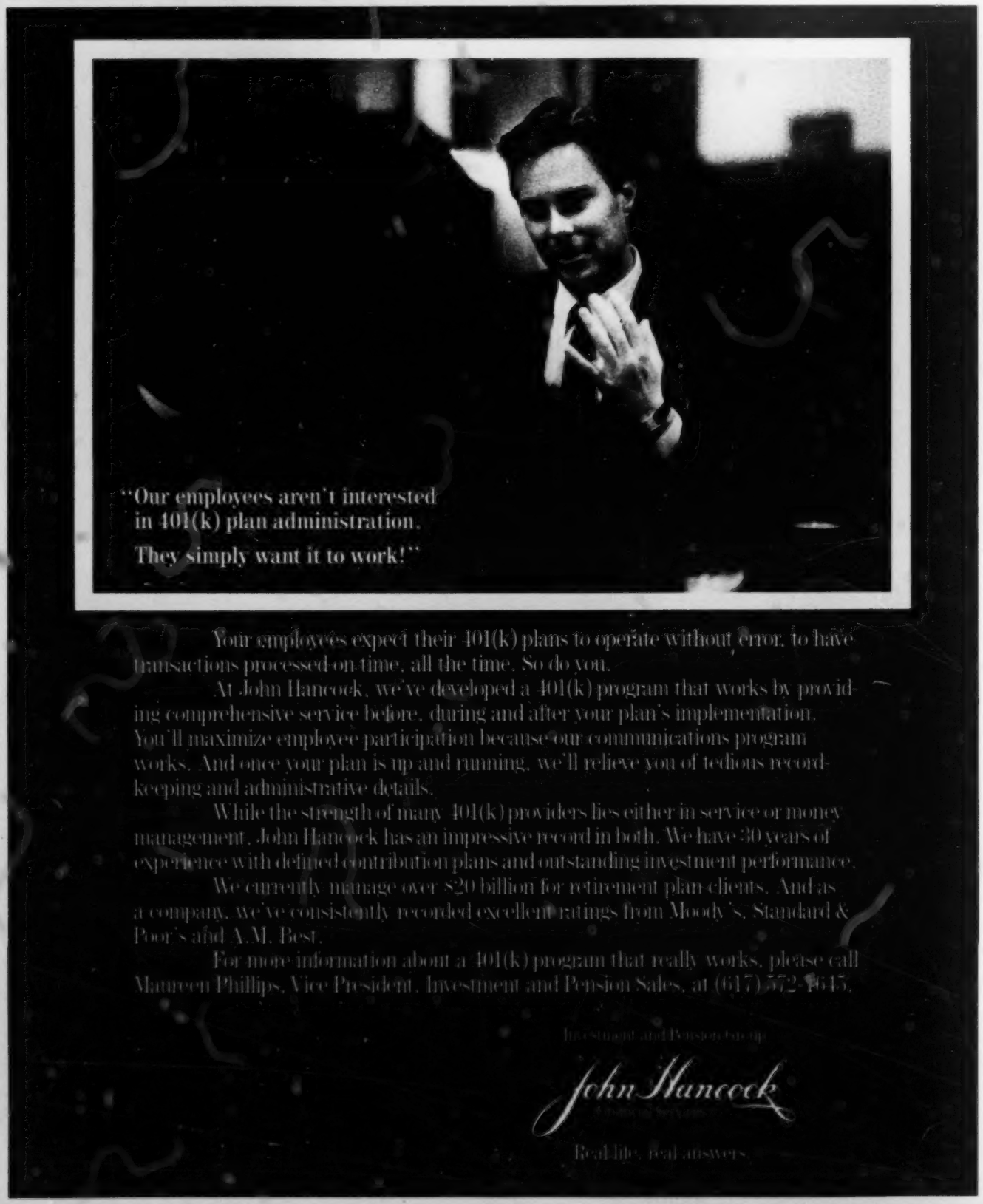
The fund uses the following external managers: Nomura; Fleming; Weatherall Green & Smith; and Stiles Harold Williams. Lazard Investors is the fund's adviser.

Key personnel overseeing the pension fund are Roy Peters, head of pension fund investments, and David Stuart, investment manager.

British Petroleum Pension Fund

	(U.S. $ millions)
Total pension assets	7,913
U.S. stocks	425
U.S. real estate	87
Internally managed assets	7,913
Asset mix:	
Domestic stocks	47%
Domestic bonds	5%
Cash equivalents	4%
Foreign stocks	20%
Foreign bonds	1%
Domestic real estate	22%
Foreign real estate	1%

LONDON — British Petroleum Pension Fund had assets of $7.913 billion as of Dec. 31. Of that, 67% was in stocks; 6% in bonds; 4% in cash; and 23% in real estate.



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Investment and Pension Group

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The fund's assets are managed in-house.

External advisers to the fund for asset allocation and market timing are J. Manser of Robert Fleming; Michael Hart, Foreign & Colonial Trust; James Tuckey, Metropolitan Estates & Property Co.; and John Gardiner, of Laird Group.

J.W. Martin, head of investments, oversees the pension fund.

British Rail Pension Trustee Co. Ltd.

	(U.S. $ millions)
Total pension assets	13,124
U.S.stocks	984
U.S. bonds	39
U.S. real estate	367
Asset mix:	
Domestic stocks	49%
Domestic bonds	14%
Cash equivalents	4%
Foreign stocks	20%
Foreign bonds	2%
Domestic real estate	8%
Foreign real estate	3%

LONDON — British Rail Pension Trustee Co. Ltd. had assets of $13.124 billion as of Dec. 31. Of that, 69% was in stocks, 16% in bonds, 4% in cash and 11% in real estate.

The fund uses the following external managers: Mercury Asset; Morgan Grenfell; Phillips & Drew; Prudential Assurance; and Robert Fleming. Jones Lang Wootton is the real estate adviser.

The fund uses actuary R. Watson & Sons to augment its in-house asset allocation and money manager selection.

Key personnel overseeing the pension fund are David Adams, chief executive, and Peter Stanyer, investment director.

Pensions & Investments' annual directory of real estate investment managers will be published in the Sept. 16 issue.

British Telecommunications Staff Superannuation Scheme

	(U.S. $ millions)
Total pension assets	20,858
U.S. stocks	818
U.S. real estate	305
Indexed assets:	
Domestic stocks	9,110
Foreign stocks	1,009
Asset mix:	
Domestic stocks	52%
Domestic bonds	14%
Cash equivalents	5%
Foreign stocks	10%
Foreign bonds	1%
Domestic real estate	15%
Foreign real estate	3%

LONDON — British Telecommunications Staff Superannuation Scheme had assets of $20.858 billion as of Dec. 31. Of that, 62% was in stocks; 15% in bonds; 5% in cash; and 18% in real estate.

PosTel Investment Management Ltd. is the principal investment manager of the fund. Other managers are Mercury Asset and Schroder Investment.

Key personnel overseeing the pension fund are M.J. Reed, secretary; Sir Douglas Morpeth, chairman of the trustees; and PosTel officials, R.N. Quartano, chairman, and Andrew Threadgold, chief executive.

Caisse de Depot et Placement du Quebec

	(U.S. $ millions)
Total pension assets	31,257
U.S. stocks	1,034
U.S. bonds	1,293
Internally managed assets	28,965
Indexed assets:	
Domestic stocks	690
Foreign stocks	1,293
Asset mix:	
Domestic stocks	27.9%
Domestic bonds	44.7%
Cash equivalents	2.1%
Foreign stocks	8.9%
Foreign bonds	5.1%
Domestic real estate	5.5%
Mortgages	5.8%

MONTREAL — The Caisse de Depot et Placement du Quebec had assets of $31.259 billion as of Dec. 31. Of that, 36.8% was in stocks, 49.8% in bonds, 2.1% in cash, 5.5% in real estate and 5.8% in mortgages.

The fund uses the following external managers: State Street Bank & Trust; HD International; Dunedin Fund Managers; Warburg International; Yamaichi International; Trust General du Canada; Fiducie Desjardins; and Trust Pret et Revenus.

Key personnel overseeing the pension fund are Michel Nadeau, senior vice president-stock market and investment planning; Claude Ferland, senior vice president-fixed-income investments; Daniel Paille, senior vice president-corporate investments; Jean-Claude Scraire, senior vice president-real estate investments; and Yves Moquin, vice president-asset mix.

Electricity Supply Pension Scheme

	(U.S. $ millions)
Total pension assets	15,630
U.S.stocks	1,235
U.S. real estate	270
Internally managed assets	15,000
Asset mix:	
Domestic stocks	53%
Domestic bonds	8%
Cash equivalents	6%
Foreign stocks	21%
Domestic real estate	10%
Foreign real estate	2%

LONDON — Electricity Supply Pension Scheme had assets of $15.63 billion as of Dec. 31. Of that, 74% was in stocks, 8% in bonds, 6% in cash and 12% in real estate.

The fund uses the following external managers: Fleming and Nomura for Far East equities; and Hill Samuel and Lloyds Investment for small U.K. companies.

Michael Cannan is the chief executive.

Imperial Chemical Industries

	(U.S. $ millions)
Total pension assets	8,299
U.S. stocks	427
Internally managed assets	8,299 billion
Asset mix:	
Domestic stocks	51.3%
Domestic bonds	11.7%
Cash equivalents	6.2%
Foreign stocks	11.1%
Foreign bonds	1.5%
Domestic real estate	14.6%
Foreign real estate	1.4%
Unlisted equities	2.2%

LONDON — The Imperial Chemical Industries PLC pension fund had assets of $8.299 billion as of Dec. 31. Of that, 62.4% was in stocks; 13.2% in bonds; 6.2% in cash; 16% in real estate; and 2.2% in unlisted equities.

Manager selection and asset allocation are handled in-house by ICI Investment Management Ltd.

Key personnel at ICI Investment Management Ltd. overseeing the pension fund are Tom Heyes, managing director, and Graham K. Allen, investment director.

Japan Mutual Aid Association of Public School Teachers

	(U.S. $ millions)
Total pension assets	44,000

TOKYO — The Japan Mutual Aid Association of Public School Teachers had assets of $44 billion as of March 31, 1990, the most recent date for which figures were available.

The fund uses the following external managers: IBJ Investment, LTCB Investment, Fuji Investment, Yamaichi Capital, Kokusai Investment, Wako International Capital, Sanyo Investment, SB Investment, Yasuda Capital, Tokio Marine, Yasudakasai-Brinson, NKU Investment, Jardine Fleming and Merrill Lynch, as well as domestic banks and insurance companies.

The information was supplied by the Japan Bond Research Institute.

Investment software: Sept. 2.

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National Union of Local Public Service Personnel Mutual Aid Association

(U.S. $ millions)

Total pension assets 14,544

TOKYO — The National Union of Local Public Service Personnel Mutual Aid Association had assets of $14.544 billion as of March 31, 1990, the latest date for which information was available.

The fund uses the following external managers: Nomura Investment, Nikko International, Daiwa International, Yamaichi International, LTCB Investment, DKB Investment, Nissei Investment and SB Investment.

The information was supplied by the Japan Bond Research Institute.

Federation of National Public Service Affiliated Personnel Mutual Aid Association

(U.S. $ millions)

Total pension assets 34,114

TOKYO — The Federation of National Public Service Affiliated Personnel Mutual Aid Association had assets of $34.114 billion as of March 31, 1990, the most recent date for which figures were available.

The information was supplied by the Japan Bond Research Institute.

State Authorities Superannuation Board of New South Wales

(U.S. $ millions)

Total pension assets	7,763
U.S. stocks	242
U.S. bonds	4
Internally managed assets	6,658
Indexed assets:	
Domestic stocks	150
Foreign stocks	147
Asset mix:	
Domestic stocks	25.6%
Domestic bonds	20.3%
Cash equivalents	5.8%
Foreign stocks	13%
Domestic real estate	35.3%

SYDNEY, Australia — The State Authorities Superannuation Board of New South Wales had assets of $7.763 billion as of Dec. 31. Of that, 38.6% was in stocks, 20.3% in bonds, 5.8% in cash and 35.3% in real estate.

Frank Russell Co. advises the fund on asset allocation and money manager selection.

Key personnel overseeing the pension fund are Wal Archer, acting president, and Shawn Mays, general manager-investments.

NTT Mutual Association

(U.S. $ millions)

Total pension assets 12,894

TOKYO — The NTT Mutual Association had assets of $12.894 billion as of March 31, 1990, the most recent date for which information was available.

The data were supplied by the Japan Bond Research Institute.

Ontario Teachers' Pension Plan

(U.S. $ millions)

Total pension assets	17,242
Internally managed assets	15,518
Indexed assets	
Domestic stocks	517
Foreign stocks	690
Asset mix:	
Domestic stocks	3%
Domestic bonds	87%
Cash equivalents	6%
Foreign stocks	4%

TORONTO — The Ontario Teachers' Pension Plan had assets of $17.242 billion as of Dec. 31. Of that, 7% was in stocks, 87% in bonds and 6% in cash.

TPF&C advises the fund on asset allocation and money manager selection.

Key person overseeing the pension fund is R.G. Bertram, senior vice president-investments.

Pension Fund Association

(U.S. $ millions)

Total pension assets 12,786

TOKYO — The Pension Fund Association had assets of $12.786 billion as of Dec. 31.

The fund uses several external managers as follows:

Banks — Mitsubishi, Yasuda, Toyo, Chuo, Sumitomo, Mitsui, Daiwa, Nippon, Barclays, Nihon Bankers Trust and Morgan Guaranty.

Insurance companies — Nihon, Sumitomo, Asahi, Chiyoda, Dai-ichi, Meiji, Yasuda and Mitsui.

Investment management companies — Nomura, Daiwa, Nikko, Yamaichi, SB, Sanwa, Fuji, DKB, Diamond, Mitsui Taiyo-Kobe, IBJ, LTCB, Jardine Fleming, Fidelity and Warburg.

The information was provided by the Japan Bond Research Institute.

Pension Welfare Service Public Corp.

(U.S. $ millions)

Total pension assets 67,919

TOKYO — The Pension Welfare Service Public Corp. had assets of $67.919 billion as of March 31.

The fund uses the following external managers:

Banks — Mitsubishi, Sumitomo, Yasuda, Mitsui, Toyo, Daiwa, Chuo, Nippon, Bankers Trust, City Trust, Barclays, Credit Suisse, Chemical and Morgan Guaranty.

Insurance companies — Nihon, Daiichi, Sumitomo, Meiji, Asahi, Yasuda, Chiyoda, Mitsui, Toho, Daido, Hukoku, Daihyaku, Kyoei, Nissan, Tokyo, Nihondantai, Taiyo and Heiwa.

The information was supplied by the Japan Bond Research Institute.

Pensioenfonds PGGM

(U.S. $ millions)

Total pension assets	22,176
U.S. stocks	1,033
U.S. bonds	186
U.S. real estate	809
Internally managed assets	11,327
Indexed assets:	
Domestic stocks	195
Foreign stocks	1,708
Asset mix:	
Domestic stocks	1.46%
Domestic bonds	63.7%
Cash equivalents	2.62%
Foreign stocks	12.79%
Foreign bonds	2.42%
Domestic real estate	6.42%
Foreign real estate	10.17%
Venture capital	0.42%

ZEIST, Netherlands — Pensioenfonds PGGM had assets of $22.176

P&I/InterSec World 300

Continued from page 19

105.	Texas Employees	U.S.	6,242
106.	Lloyds Bank	U.K.	6,180
107.	Procter & Gamble	U.S.	6,078
108.	General Dynamics	U.S.	6,069
109.	Prudential Insurance	U.S.	5,856
110.	Tokyo-to Public Service	Japan	5,820
111.	Missouri Public Schools	U.S.	5,800
112.	Allied-Signal	U.S.	5,770
113.	Westinghouse Electric	U.S.	5,554
114.	Lonmodiagernes Dyrtids	Denmark	5,540
115.	Canadian Nat'l Rail	Canada	5,510
116.	Metaalindustrie BPF	The Netherlands	5,470
117.	Metaalnijverheid BPF	The Netherlands	5,400
118.	Nederlandse Spoorwegen	The Netherlands	5,290
119.	Bayerische Arztever.	Germany	5,110
120.	Chrysler	U.S.	5,096
121.	Bell Canada	Canada	4,950
122.	Iowa Employees	U.S.	4,916
123.	State Service Super. (Qld)	Australia	4,770
124.	United Mine Workers	U.S.	4,759
125.	Commonwealth Funds	Australia	4,710
126.	Mobil Oil	U.S.	4,675
127.	Amoco	U.S.	4,665
128.	Midland Bank	U.K.	4,550
129.	Unisys	U.S.	4,534
130.	Alaska State	U.S.	4,430
131.	Hospitals of Ontario	Canada	4,400
132.	Unilever	U.K.	4,360
133.	San Francisco	U.S.	4,331
134.	Mississippi Employees	U.S.	4,319
135.	Illinois Municipal	U.S.	4,239
136.	Caterpillar	U.S.	4,221
137.	SBB	Switzerland	4,220
138.	All Japan Mutual Credit	Japan	4,190
139.	Pacific Gas & Electric	U.S.	4,172
140.	Strathclyde Regional	U.K.	4,130
141.	Hawaii Employees	U.S.	4,119
142.	Greater Manchester Cty.	U.K.	4,110
143.	Merchant Navy	U.K.	4,080
144.	Monsanto	U.S.	4,055
145.	General Electric	U.K.	4,030
146.	Bayer AG	Germany	4,000
147.	Dow Chemical	U.S.	4,000
148.	United Airlines	U.S.	4,000
149.	Ford Motor	U.K.	3,980
150.	Delta Air Lines	U.S.	3,977
151.	Illinois State Universities	U.S.	3,959
152.	British Broadcasting	U.K.	3,930
153.	Detroit City	U.S.	3,925
154.	UNIRS	France	3,910
155.	Lucas Industries	U.K.	3,860
156.	KLM	The Netherlands	3,850
157.	Utah State	U.S.	3,850
158.	American Airlines	U.S.	3,800
159.	Prudential	U.K.	3,790
160.	Migros	Switzerland	3,770
161.	Kansas Employees	U.S.	3,751
162.	Georgia Employees	U.S.	3,750
163.	British Aerospace	U.K.	3,710
164.	Nat'l Elec. Contractors	U.S.	3,692
165.	CIBA-GEIGY	Switzerland	3,690
166.	City of Zurich	Switzerland	3,690
167.	Grafische BPF	The Netherlands	3,690
168.	Kentucky Teachers	U.S.	3,678
169.	Chicago Teachers	U.S.	3,611
170.	Baugewerbe ZVK	Germany	3,590
171.	Atlantic Richfield	U.S.	3,575
172.	Ontario Hydro	Canada	3,530
173.	L.A. Fire & Police	U.S.	3,459
174.	United Methodists	U.S.	3,459
175.	Louisiana Teachers	U.S.	3,457
176.	Canton of Zurich	Switzerland	3,450
177.	Commonwealth Banking	Australia	3,440
178.	Metropolitan Life	U.S.	3,395
179.	Hoechst AG	Germany	3,390
180.	RJR Nabisco	U.S.	3,364
181.	Southern Co. Services	U.S.	3,350
182.	Xerox	U.S.	3,333
183.	Nevada Employees	U.S.	3,308
184.	Northrop	U.S.	3,304
185.	Kentucky Retirement	U.S.	3,300
186.	Martin Marietta	U.S.	3,300
187.	Texaco	U.S.	3,300
188.	TSB Group	U.K.	3,300
189.	Minn. Mining & Mfg.	U.S.	3,288
190.	Canadian Pacific	Canada	3,280
191.	ALCOA	U.S.	3,270
192.	IBM Deutschland	Germany	3,270
193.	Consolidated Edison	U.S.	3,257
194.	Coop Schweiz	Switzerland	3,250
195.	State Farm	U.S.	3,240
196.	World Bank	U.S.	3,171
197.	W. Midlands Met.	U.K.	3,130
198.	Indiana Employees	U.S.	3,104
199.	Grumman	U.S.	3,101
200.	Ohio Police & Firemen	U.S.	3,101
201.	Bethlehem Steel	U.S.	3,080
202.	Illinois State Board	U.S.	3,045
203.	London Reg'l Transport	U.K.	3,020
204.	West Yorkshire	U.K.	3,010
205.	ITT	U.S.	2,990
206.	SSIH	Switzerland	2,990
207.	Raytheon	U.S.	2,982
208.	J.C. Penney	U.S.	2,964
209.	Textron	U.S.	2,961
210.	Imperial Group	U.K.	2,880
211.	London Pension Funds	U.K.	2,850
212.	Honeywell	U.S.	2,839
213.	Tenn. Valley Authority	U.S.	2,834
214.	Ohio School Employees	U.S.	2,824
215.	Tenneco	U.S.	2,824
216.	Rover Group	U.K.	2,820
217.	TRW	U.S.	2,783
218.	Hydro Quebec	Canada	2,770
219.	Aetna Life & Casualty	U.S.	2,758
220.	Massachusetts PRIM	U.S.	2,700
221.	Hitachi	Japan	2,690
222.	Southern Baptist	U.S.	2,680
223.	Int'l Paper	U.S.	2,673
224.	Eli Lilly	U.S.	2,670
225.	Matsushita Electric	Japan	2,650
226.	Los Angeles City	U.S.	2,620
227.	Union Carbide	U.S.	2,608
228.	IBM	U.K.	2,590
229.	Onderling BPF	The Netherlands	2,590
230.	Hoogovens	The Netherlands	2,580
231.	Deere	U.S.	2,450
232.	Phillips Petroleum	U.S.	2,450
233.	Allied-Lyons	U.K.	2,440
234.	Unilever	The Netherlands	2,440
235.	Sun Alliance Insurance	U.K.	2,400
236.	Texas Municipal	U.S.	2,400
237.	Toshiba	Japan	2,400
238.	Boilermaker-Blacksmiths	U.S.	2,395
239.	Canton of Geneva	Switzerland	2,380
240.	Rolls-Royce	U.K.	2,330
241.	Owens-Illinois	U.S.	2,326
242.	Rhode Island	U.S.	2,322
243.	BASF	Germany	2,300
244.	Presbyterian Church	U.S.	2,300
245.	S. California Edison	U.S.	2,300
246.	Texas County & District	U.S.	2,297
247.	Trans World Airlines	U.S.	2,282
248.	Halliburton	U.S.	2,260
249.	BP America	U.S.	2,235
250.	Louisiana State	U.S.	2,234
251.	Arkansas Teachers	U.S.	2,216
252.	Abbott Laboratories	U.S.	2,210
253.	Met. Borough of Wirral	U.K.	2,190
254.	Central Electricity Cos.	Switzerland	2,180
255.	Air Canada	Canada	2,160
256.	C.R.P.N.C.P.	France	2,140
257.	STC	U.K.	2,130
258.	Nat'l Rural Elec. Co-op	U.S.	2,120
259.	Int'l Op. Engineers	U.S.	2,114
260.	BTR	U.K.	2,110
261.	DSM	The Netherlands	2,110
262.	Koopvaardij BPF	The Netherlands	2,110
263.	Mijnwerkers (Limburg)	The Netherlands	2,110
264.	Oklahoma Teachers	U.S.	2,097
265.	S. Calif. Food/Comm.	U.S.	2,073
266.	Bakery/Confectionery	U.S.	2,070
267.	Chicago Municipal	U.S.	2,068
268.	Philips	U.K.	2,040
269.	Sygehjaelpere mfl	Denmark	2,040
270.	Canton of Bern	Switzerland	2,030
271.	Commonwealth Edison	U.S.	2,029
272.	United Parcel Service	U.S.	2,026
273.	Akzo	The Netherlands	2,020
274.	Motorola	U.S.	2,019
275.	PPG Industries	U.S.	2,011
276.	Citibank	U.S.	2,006
277.	Navistar	U.S.	2,005
278.	Asea Brown Boveri	Switzerland	2,000
279.	Indiana State Teachers	U.S.	2,000
280.	Armco	U.S.	1,995
281.	New Mexico Educational	U.S.	1,990
282.	Anheuser-Busch	U.S.	1,986
283.	Huisartsen BPF	The Netherlands	1,980
284.	Travelers Insurance	U.S.	1,980
285.	Thorn EMI	U.K.	1,970
286.	Allianz Versicherungs	Germany	1,960
287.	Civil Aviation Authority	U.K.	1,960
288.	PTT Nederland	The Netherlands	1,950
289.	Swissair	Switzerland	1,950
290.	Canton of Vaud	Switzerland	1,950
291.	Magistre	Denmark	1,940
292.	Victoria State Superann.	Australia	1,930
293.	General Motors Canada	Canada	1,900
294.	Japan Securities Dealers	Japan	1,880
295.	Laegernes	Denmark	1,870
296.	New Mexico Employees	U.S.	1,860
297.	American Stores	U.S.	1,854
298.	Episcopal Church	U.S.	1,850
299.	L.A. Water & Power	U.S.	1,850
300.	Inland Steel	U.S.	1,848

billion as of Dec. 31. Of that, 14.25% was in stocks, 66.12% in bonds, 2.62% in cash, 16.59% in real estate, and 0.42% in venture capital.

A key person overseeing the pension fund is D.J. de Beus, chairman of the board of managing directors.

Philips Pension Funds

	(U.S. $ millions)
Total pension assets	10,490
U.S. stocks	700
U.S. bonds	110
U.S. real estate	266
Internally managed assets	9,900
Indexed assets:	
Foreign stocks	100
Asset mix:	
Domestic stocks	7%
Domestic bonds	22%
Cash equivalents	2%
Foreign stocks	16%
Foreign bonds	5%
Domestic real estate	11%
Foreign real estate	5%
Other	32%

EINDHOVEN, Netherlands — Philips Pension Funds had assets of $10.49 billion as of Dec. 31. Of that, 23% was in stocks, 27% was in bonds, 2% in cash, 16% in real estate and 32% in private loans and mortgages.

The fund uses the following external managers: G.T. Capital Management; Jardine Fleming; Mercury Asset; J.P. Morgan; Morgan Grenfell; Pacific Asset; Daiwa (Alpha Price Theories Fund); and Nikko (Japan Industries Fund).

Asset allocation and money manager selection are handled in-house.

Key personnel overseeing the pension fund are D. Snijders, president, and J. van der Vliet, director.

Police Personnel Mutual Aid Association

	(U.S. $ millions)
Total pension assets	9,595

TOKYO — The Police Personnel Mutual Aid Association had assets of $9.595 billion as of March 31, 1990, the most recent date for which information was available.

The fund uses the following external managers: LTCB Investment, Nikko International, Nomura Investment, and Daiwa Investment, as well as domestic banks and insurance companies.

The information was supplied by the Japan Bond Research Institute.

Post Office Staff Superannuation Scheme

	(U.S. $ millions)
Total pension assets	13,780
U.S. stocks	519
U.S. real estate	197
Indexed assets:	
Domestic stocks	5,960
Foreign stocks	652
Asset mix:	
Domestic stocks	52%
Domestic bonds	13%
Cash equivalents	6%
Foreign stocks	10%
Foreign bonds	1%
Domestic real estate	15%
Foreign real estate	3%

LONDON — Post Office Staff Superannuation Scheme had assets of $13.78 billion as of Dec. 31. Of that, 62% was in stocks; 14% in bonds; 6% in cash; and 10% in real estate.

PostTel Investment Management Ltd. is the principal manager of the fund. Other managers are Mercury Asset and Schroder Investment.

Key personnel overseeing the pension fund are M.C. Duncombe, secretary; R.A. Cox, chairman of the trustees; and, with PosTel, R.N. Quartano, chairman, and Andrew Threadgold, chief executive.

Prefectural Government Mutual Aid Association

	(U.S. $ millions)
Total pension assets	10,276

TOKYO — The Prefectural Government Mutual Aid Association had assets of $10.276 billion as of March 31.

The fund uses the following external managers: Nomura Investment, Nikko International, Daiwa International, Yamaichi International and LTCB Investment, as well as domestic banks and insurance companies.

The information was supplied by the Japan Bond Research Institute.

Mutual Aid Association of Private School Personnel

	(U.S. $ millions)
Total pension assets	12,161

TOKYO — The Mutual Aid Association of Private School Personnel had assets of $12.161 billion as of March 31.

The information was supplied by the Japan Bond Research Institute.

Investment management consultants will be profiled in the Nov. 11 issue of *Pensions & Investments*.

Small-plan audits scaled back

ASPA victorious by keeping up heat

The Internal Revenue Service is retreating on its small-plan auditing program.

The program has been under relentless attack by the American Society of Pension Actuaries, a Washington-based trade association. The ASPA claims the program was designed to raise $666 million in revenue by retroactively imposing arbitrary actuarial assumptions on pension plans with five or fewer participants between 1986 and 1988.

This spring, the government dropped its appeal of a court ruling ordering the IRS to hand over documents related to the program to the ASPA and pared its examinations to less than 12,000 employers from 18,000.

The IRS said June 18 it would ignore penalties or certain excise taxes on small employers whose plan contributions had been challenged under the program. Employers have until March 31, 1992, to take up the IRS' offer — before key test cases brought under the program are likely to be resolved.

Now, a Treasury Department appropriations bill passed by the Senate would require the General Accounting Office to study the small-plan program. The House bill does not contain an equivalent provision, but Chester Salkind, the ASPA's executive director, is optimistic House conferees will support the Senate provision.

In supporting an amendment by Sen. Dennis DeConcini, D-Ariz., requiring the study, Sen. Robert Kasten, R-Wis., criticized the program for unfairly punishing small employers. "Not only is it affecting employers whose deductions are being disallowed, but it is sending a message to all small businesses to be wary of establishing a pension plan. This is clearly contrary to elemental fairness and to the goal of providing broader coverage under the private pension system."

An IRS spokeswoman declined to comment on the pending legislation. ■

WHO JUST WON A BILLION DOLLAR VOTE OF CONFIDENCE?

Turning distress into profits

By Marlene Givant Star

The number of distressed and bankrupt securities will snowball in the 1990s as more high-yield issuers default, offering potential returns as high as 40% or more to seasoned "vulture" investors.

That's the message Phillip Schaeffer, senior vice president of Robert Fleming Inc., New York, is delivering to U.K. pension fund clients of the firm.

"Business schools teach that in order for a business to be exceedingly profitable, it should have focus, significant competitive advantages and relatively few competitors. The distressed investing business has all three," said Mr. Schaeffer, who manages distressed securities for Fleming's own account.

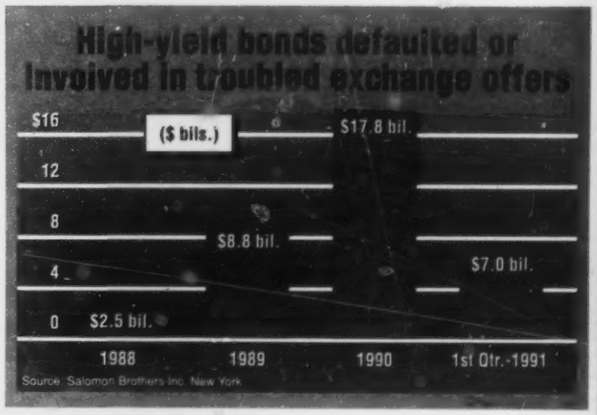
"We believe the excessive debt created in the 1980s will generate a large number of defaults and bankruptcies in the 1990s. The Allied Stores Corp./Federated Department Stores Inc. bankruptcy filing in January 1990 began this torrent, which is continuing," he said.

In 1980, $7 billion of high-yield bonds had been issued by American companies; by the end of the decade, the total exceeded $220 billion.

The leveraged buy-out boom of the 1980s has fueled unprecedented defaults. High-yield bonds with a principal amount of $2.6 billion defaulted or were involved in troubled exchange offers in 1988; that amount increased to $17.8 billion in 1990. In the first quarter of 1990 alone, the total was $7 billion.

Of the more than 200 major leveraged buy-outs financed through the high-yield market in the 1980s, many have not met their subsequent income and cash flow goals. Consequently, they are overleveraged relative to their lower-than-expected operating results, Mr. Schaeffer said.

Many are facing "critical event dates," which result from debt maturities; sinking fund payments; reset provisions; payment-in-kind securities going to cash payments; and zero-coupon bonds going to full-pay coupon bonds.



According to a Salomon Brothers Inc. survey of highly leveraged companies, about $49 billion of securities have critical event dates between 1992 and 1994.

"We believe that many of these issuers will default in respect of the action required on the critical event date, thereby creating huge amounts of defaulted debt over this time period," he said.

1991 will be another record year for defaults, he predicts.

"The significant supply of distressed, defaulted and bankruptcy-related debt will continue to overwhelm the limited amount of funds available for investment in such areas, providing opportunities to purchase debt at compelling price levels and allowing the long-term investor to make substantial returns," Mr. Schaeffer said.

He said returns are attractive because of the market's abundant inefficiencies. Investors who find themselves owners of distressed securities do not understand or want to participate in the market and frequently sell at prices substantially below the investments' cost, but at prices that are alluring to experienced distressed security investors.

"Distressed investing requires skills involving bankruptcy law, experience and knowledge of the reorganization process and personal contacts. Consequently, the relatively small number of experienced distressed security investors have a significant advantage over other investors who do not have such expertise, knowledge and experience," he said.

Mr. Schaeffer began investing in the budding field six years ago. He prefers to invest in otherwise healthy companies that merely have too much debt, such as Allied/Federated, or those with an isolated problem or event that can be rectified, i.e. asbestos in the case of Manville Corp., or product defects in the case of A.H. Robins Co. Inc.

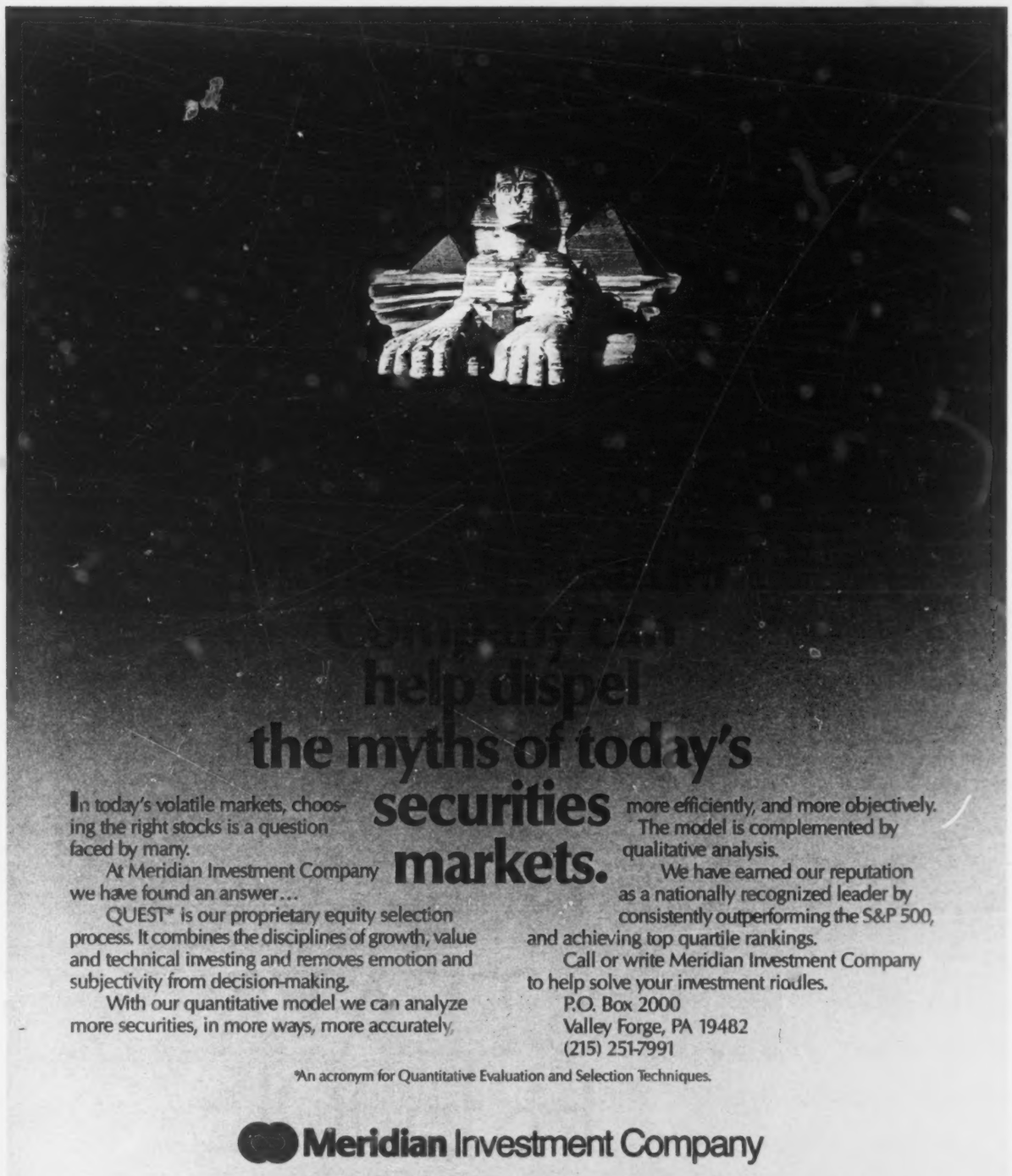
He avoids companies with bad industry or company conditions, poor management or fraud, such as Integrated Resources Inc., Revco D.S. Inc. and Crazy Eddie Inc., respectively.

"I don't like to invest in disasters just because they're cheap," he said.

Investing in bankrupt or distressed companies used to carry with it the substantial risk that the company would go through a liquidation instead of a reorganization. Bankrupt companies in the United Kingdom tend to liquidate even today.

In the United States, however, that is not the case.

U.S. bankruptcy laws were changed in 1978 in ways that encouraged bankrupt companies to reorganize, making "investing in American bankrupt and distressed companies much more interesting and financially rewarding," he said. ■



Using past to gauge future

Sharpe finds manager styles tend to hold true to form

By Chuck Paustian

Evaluating active managers — in terms of both style and performance — has been an elusive endeavor confounding many executives who oversee investment pools.

William F. Sharpe, chairman of William F. Sharpe Associates, a consulting firm for pension funds, endowments and foundations in Los Altos, Calif., and co-recipient of the 1990 Nobel Memorial Prize in Economic Science, has devised a process that accomplishes both tasks.

By looking at a manager's historical returns, Mr. Sharpe devises a benchmark portfolio, which is used to determine what characteristics and exposures a manager brings to a fund's overall management and the extent to which a manager added value through the active management process.

His examination of 408 mutual fund portfolios between 1986 and 1989 found managers are highly consistent in maintaining their investment styles. In addition, the research showed as much as 90% of the median manager's monthly performance can be attributed to his or her style.

The following is an edited transcript of a recent interview with Mr. Sharpe.

* * *

P&I: Briefly describe your recent research effort.

Mr. Sharpe: We have been looking at two questions: Is it possible to predict the style of an investment manager, and is it possible to predict the ability of the manager to beat its style? Equivalently, what is the manager's selection ability?

By style, we mean the particular exposures the manager brings to a portfolio; that is, to moves in major asset classes. In this research, we have used a set of 12 asset classes. Those classes are: Treasury bills, intermediate government bonds, long government bonds, corporate bonds, mortgage-related securities, large value stocks, large growth stocks, medium-capitalization stocks, small-capitalization stocks, non-U.S. bonds, Japanese stocks and non-Japanese foreign stocks.

Were these 12 classes chosen because of their correlation?

Partly. We were looking for asset classes that moved in different ways, and correlation is obviously part of that. We were looking for asset classes that could be defined as mutually exclusive, that would collectively cover investments made by U.S. investors, that could be invested in passively for a reasonably low cost. We made the decision on these particular classes based on their ability to explain the behavior of a series of investment managers that our clients used.

With style, we're trying to understand, and ultimately predict, how the bottom-line return of a fund is going to be affected by moves in these major asset classes.

The technique we use to determine it ex-post is to take a history of monthly returns for the manager, or a mutual fund in the case of this study, and lay them alongside the monthly returns of all 12 asset classes and, except in special cases, we ask the computer to come up with a combination that "moved most like" the manager or fund in question over a historical period.

We constrain the computer under normal conditions to combinations that have between zero and 100% in each of the 12 asset classes. And, of course, the sum of the positions has to equal 100%.

We want to find the mix that had the minimum tracking variance, which is the difference between the manager of the fund and the mix that we're looking at. To do that, you have to use a mathematical technique called quadratic programming.

What we're working on now is finding the extent to which applying this method over some past period can give you useful information about the future.

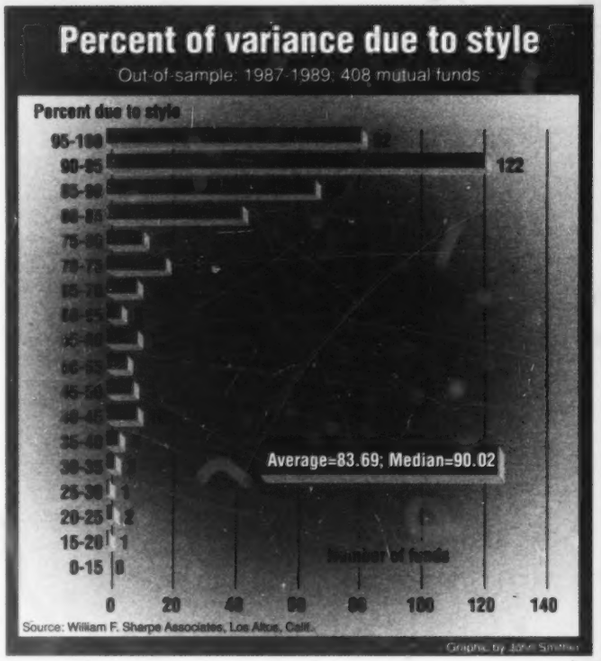
Before I talk about that, let me talk about what we mean by selection. Selection is very simply the difference between the return the manager gets and the return on a benchmark with the same style. If the manager beats that benchmark, he or she has a positive selection return; if the manager is beaten by the benchmark, it's negative.

The notion here is that active managers try, at least, to provide positive selection returns. And, over the long run, if you don't get those positive selection returns, it calls into question the efficacy of that particular active management style. You have to recognize, of course, that only a minority of active managers can get that.

How often do you review the benchmark portfolio and how often does it change?

Every single month potentially. Let's say it's February 1991, we use the returns for the manager

See **Sharpe** *on page 47*



Some Plain Talk About Defined Contribution Plans

RESPONSIBILITY

Selecting a provider for your company's 401(k) plan is a complex undertaking with far-reaching and long-lasting consequences. You bear a great responsibility to choose well. So when you select a company, or review your present providers, you will want to focus on the factors that really matter–the fundamental issues.

Employees Your first responsibility is to your company's employees because it's their financial security which is at stake. Since participants make their own investment decisions, you must ensure that all–the experienced and the novice alike–are provided with adequate education about the fundamentals of long-term investing. Employees should also be given convenient and timely access to information and the ability to change their investment line-up easily and quickly when necessary.

Your responsibility doesn't end when employees' initial selections have been made. Adequate information must also be provided as they transition through an employment career and on into retirement. The company you select should always be there for them.

Performance Of course, you want good performance. But in addition, your larger responsibility is to provide a broad, well-defined selection of investment options which provide dependable results over the long term. Your investment options–from conservative to aggressive–should be managed for specific objectives with each following a tightly prescribed and understandable investment strategy.

Partnership You strive for excellence in your own company. You should expect no less a commitment from a partner. Your administrative partner should have a deep line-up of well-trained people who will be ready to serve your needs, not only in the basics of timeliness and accuracy, but in responding to special requests. Your company is continually changing. Your partner should be flexible enough to grow and change with you.

Value You are willing to pay for quality, which does not mean excessive fees, but fair remuneration for value received. There should be no hidden assessments, no charges later on when you discover that your contract fees cover only minimum service levels. You should require full disclosure. And the same recognition of value should be present in the costs incurred by your participants for investment management and fund administration.

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Sharpe

Continued from page 46

up to and including December 1990 to estimate the style going into February 1991. We want to use information that you really could have had before February started. The notion here is that you could have dropped that manager in January and bought a set of index fund portfolios that replicate the same style. But since you didn't do that, the question becomes: How did the manager do vis-a-vis that benchmark?

In reality, what is the frequency of change?

The way we address that question is to ask: How much of the monthly variation in returns can be explained by the manager's style as determined the month before? What we found was that across a sample of 408 bond, stock and balanced mutual funds, roughly 90% of the median manager's monthly variation could be attributed to style as estimated in advance with this method and with what's going on in the markets. We've known that in sample, you can explain 85%, and in some cases more than that.

What this suggests is that with the mutual funds, and I might add we see the same thing with the separately managed accounts for our clients, these managers do maintain a substantially consistent style. And the ones who had a very tight style in the past tend to have tight styles in the future.

The other side is the selection — whether or not you can find managers in the future who will bring selection to the party by simply looking at whether or not they've done so in the past. Here the results are far less satisfying. The data do suggest some consistency, but of the 204 managers that were in the top half during 1984 to 1986, only 109 were in the top half in the 1987 to 1989 period. That's not a lot to get excited about.

By pinpointing the benchmark portfolio so finely — for example saying this is a small, Japanese, growth stock manager — don't you run the risk of overclassifying a manager?

I think you run the clear danger of misclassifying. If a manager has changed strategy irrevocably in the past month, it's going to be a fair number of months before your data start showing you that, and you're going to have the wrong idea of what he or she is.

Even if a manager is unique, you can put something together that would be very much like it, and we can compare this manager who is unique and we can give him a benchmark that's relevant and find out if he's giving you something that you couldn't have gotten more cheaply and with less added uncertainty.

So you can decide whether a passive index fund approach would have given you the same performance at a lower cost?

You know active management around the exposure is adding risk. The question is: What are you really getting? The way the study goes about answering that is with what is often called the Sharpe Ratio, which is the added value through selection per unit of added risk.

In principle, if you expect to get a positive Sharpe Ratio after costs, then this fund is better than a set of index funds. If you're choosing between two active managers, everything else being equal, you'd want the one with the higher predicted Sharpe Ratio. The problem is, the historical Sharpe Ratio doesn't seem to be telling us much about the future Sharpe Ratio. We don't know, however, how much of this is sample specific or due to the fact that the sample was limited to funds in existence throughout the period.

How does your benchmark portfolio approach to measurement and analysis differ from other approaches?

A lot of the others look at one or more portfolios, in other words they open the hood and see what the manager has.

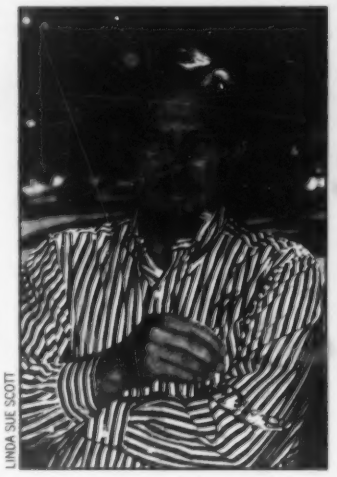
The problem with looking at only what managers have today is if you have someone who does rotate, what they have today may not give you a sense of what they're likely to have in an average month. By looking longitudinally, you get a sense of their longer term natural stance. I think for asset allocation purposes, you want a better sense of their normal stance. And for performance purposes, you generally want to compare their performance with that longer term normal stance.

There's also the issue of how you classify a manager. Some consultants, and mutual fund services as well, continue to force every manager into one box. Everything we've seen suggests that is too confining and too simplistic. Real managers aren't that simple.

You need some method to recognize subtleties and shadings. People who try to do that, do it in different ways. We use 12 asset classes. With the BARRA procedures, for example, for U.S. equity managers they will use in some cases their entire 68-factor model. So they'll represent a manager in terms of exposures to potentially up to 68 different things.

We also do it, in effect, externally. We don't sit down with the manager and say, "Well, what's a normal portfolio for you?" Some of the consultants and/or their clients will sit down with a manager and come up with a list of securities. The trouble with that is that you have to keep updating it to stay on top of what the markets are doing. It's very labor intensive, which doesn't make it wrong, just more expensive.

I guess another difference is we're trying to come up with characterizations that can be put together for the fund as a whole. ■



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AT DEADLINE

Doug Crow lands new job

Douglas Crow, former managing director of benefit plan assets and assistant treasurer at EDS, Dallas, joined Tropicana Energy in Dallas as vice president-finance and controller.

Mr. Crow resigned abruptly from EDS in March 1990. Later, a former EDS employee filed suit, alleging Mr. Crow and other EDS treasury officials engaged in numerous illegal activities while running the EDS pension fund, including conflict-of-interests transactions, insider trading, misuse of corporate funds and falsification of documents.

Panel accepts golf study

Texas' Pension Review Board accepted the outside study it had ordered on the investment process and guidelines of two golf course investments made by the Houston Municipal Employees Pension System, but took no action because the study arrived too late for board members to review.

The study follows criticism by the City Council over the developer — BSL Golf Corp. — borrowing $7 million from the fund to use for its equity stake.

The study was conducted by Russell-Zisler Inc.

Bell Atlantic alters benefits

Bell Atlantic is implementing benefit changes for retirees beginning in 1994 that will increase cost-sharing expenses for retirees who retire after 1991; freeze the size of the sickness death benefit; and increase the minimum-discounted pension age to 60 from 55 over an eight-year period.

In addition, the company is offering retirement incentives for 3,500 salaried employees who retire by Dec. 15.

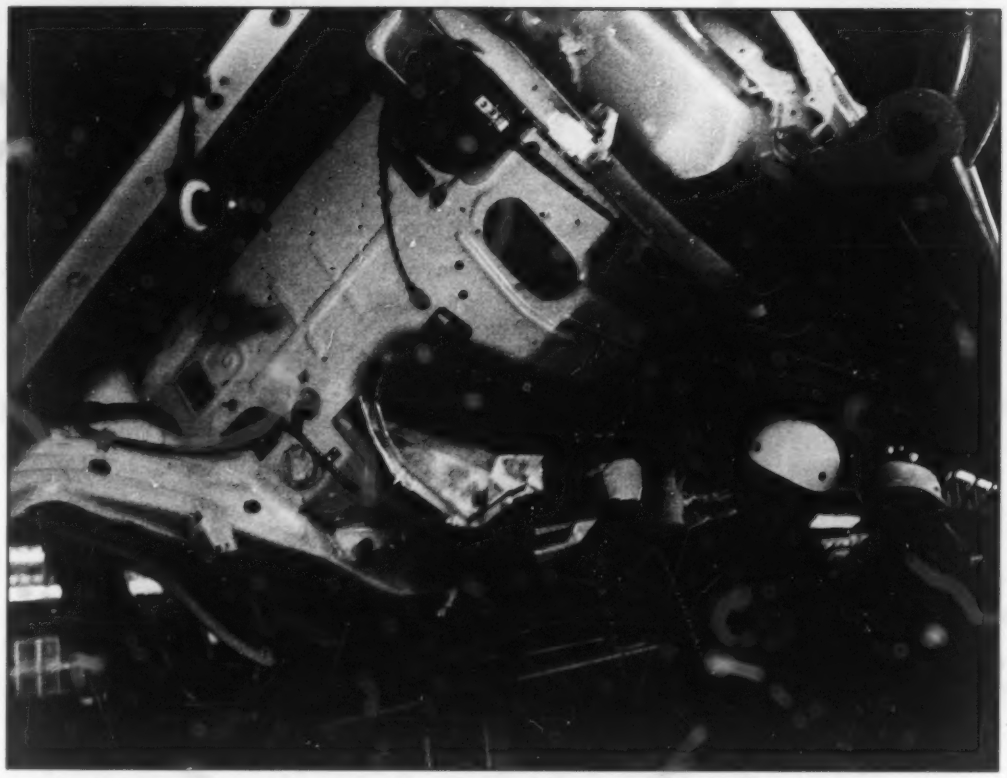
A Bell spokesman said the

Continued on page 34

INSIDE

A matter of concentration

In the past two years, Halliburton executives have diversified the company's stable value fund from 100% GICs to less than 50% GICs — an action other sponsors now are expected to follow. Page 3.



Chrysler's proposal to contribute stock to its pension fund was some of the better news for the PBGC.

PBGC rides roller coaster

Some woes ease but others grow

By Joel Chernoff

WASHINGTON — The Pension Benefit Guaranty Corp.'s hopes of avoiding financial disaster have been riding a roller coaster.

The PBGC won a key concession during the battle for Pan Am Corp. assets, and agency officials are encouraged that Chrysler Corp. will contribute stock to its pension plans, which are underfunded by $3.6 billion.

But despite being buoyed by those actions, a PBGC attempt to force The LTV Corp. to make contributions to its three underfunded pension plans is in jeopardy of scuttling the company's reorganization plans. Plus, New Valley Corp. (formerly Western Union Corp.) announced it is discussing transferring its pension plans, underfunded by $390 million, to the PBGC.

As a result, losses still are looming for the deficit-plagued agency.

Already saddled with a $2 billion deficit, the agency's most pessimistic scenario shows the deficit soaring to $11.4 billion by 2000. But PBGC officials acknowledge that scenario assumes a relatively robust economy and in-

See **PBGC** *on page 32*

Big funds participate in AMI financing

By Marlene Givant Star

DALLAS — American Medical International Inc., among the last big leveraged buy-outs of the 1980s, will issue $175 million of senior subordinated notes in one of the few public junk bond offerings so far this year.

AMI also will issue 16.2 million shares of common stock.

The offering was expected to be priced late last week.

Of the common stock, which will be issued by American Medical Holdings Inc., $92 million worth will be placed privately at the public market price with GKH Private, a Chicago-based partnership, and MB L.P. I, a partnership affiliated with The First Boston Corp., the lead manager of the offerings. The two partnerships acquired AMI less than two years ago in a $1.67 billion LBO transaction valued at $3.09 billion in cash and debt assumption.

GKH Private, a $550 million private equity fund — whose pension investors include Los Angeles County, Boeing Co., New York State & Local Retirement and General Motors Corp. — will own 32.4% of AMI after the offerings and private sale of shares.

Bob Hinckley, assistant press secretary for New York Comptroller Edward V. Regan, who oversees the New York State & Local Retirement Systems, said the $50 million stake in GKH Private is "one of our smaller LBO investments. Of that, $12.5 million has

See **AMI** *on page 31*

Buying American

U.S.-based firms score in foreign arena

By Margaret Price

American pension funds increasingly are hiring U.S. money managers, rather than non-U.S. ones, to invest their foreign assets.

At the same time, the pool of such managers is widening.

Data from the Tracker service of Eager & Associates, Louisville, Ky., underscore the grim news for non-U.S.-based international managers. From a high of 47.1% of all international hires by U.S. sponsors in the year ended June 1988, non-U.S. firms claimed only a 23.2% share in the year ended June 1990.

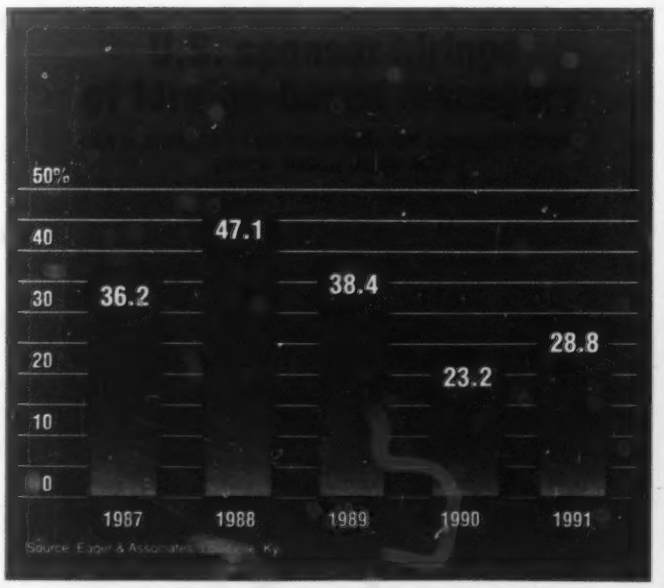
While foreigners' share crept up to 28.8% of hires for the year ended June 1991, that modest rise doesn't reverse the trend, believes Glenn Davis, a partner in Eager & Associates.

Experts cite a host of cultural and professional reasons to explain the market share, ranging from a diminishing sense of excitement by pension officials in hiring a foreign manager — and making visits abroad — to often easier communications in a more convenient time zone.

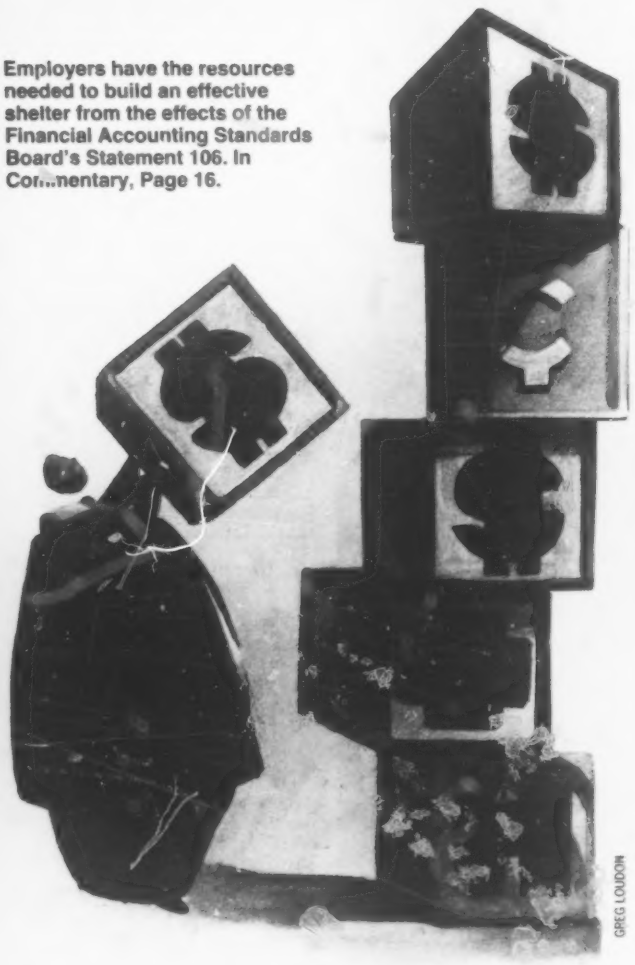
Moreover, U.S. money managers are widely believed to lead the world in portfolio management theories and technologies, a number of which are used in international investing.

Quite a few U.S.-based interna-

See **Managers** *on page 31*



NEWS DIGEST



GREG LOUDON

Employers have the resources needed to build an effective shelter from the effects of the Financial Accounting Standards Board's Statement 106. In Commentary, Page 16.

CREF participants have been slow to transfer assets to outside vendors, but the managers say they're willing to wait for the business. Page 13.

SPECIAL REPORT: PIPER

Surging high-yield prices propelled the performance of some top-notch bond portfolios, while mortgage funds were among the best real estate investments. Page 19.

FINANCING

American Medical International's issue is one of the few public offerings of junk bonds to come to market this year. Page 1.

INTERNATIONAL

U.S. pension funds increasingly are turning to American investment managers when hiring for international accounts. Page 1.

Japan's Ministry of Finance is urged to conduct a full investigation into the country's trading scandal. Page 33.

REAL ESTATE

Baring Institutional Realty decides to pull its Empire Fund off the market after investors take a pass on the partnership. Page 6.

California's two state funds revise their systems for handling cash in their realty portfolios. Page 12.

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California may cut funding

Governor to pick actuary for fund

By Steve Hemmerick

SACRAMENTO, Calif. — Gov. Pete Wilson is expected to name a new actuary this week for the California Public Employees' Retirement System, a decision that system officials think could result in a major slash in state pension funding.

Some fund officials say they expect the governor and Legislature quietly will lop off as much as $480 million a year in government pension contributions under the cover of actuarial changes in assumption rates.

An attempt to block the governor from replacing the current actuary, chosen by the system's board, has been made through a legal petition. A coalition of employees, including the Association of California State Attorneys & Administrative Law Judges, filed the petition Aug. 1 in the State Court of Appeal, Third District, in Sacramento.

The petition asks for a stay in the appointment of a new actuary. The court's decision on whether to grant the stay could come as early as this week, said Anne Stausboll, an attorney with the California State Employees Association, a member of the coalition.

AP/WIDE WORLD PHOTOS

California Gov. Pete Wilson could cut pension contributions by as much as $480 million through actuarial changes.

The appellate court's final ruling on whether the governor has the right to appoint the actuary might not come before October; new actuarial figures to decide state pension funding levels could be needed earlier.

Although public pension officials generally depend on the general public to defend the funds against government financial raids, CalPERS officials can't rely on a public outcry over this situation because the actuarial process is so hard for the public to understand.

When the California Legislature

See **Actuary** *on page 34*

Merger to boost trust business

Bank of America would return in force

By Cur[illegible]osti

Bank of America will return to the institutional trust business with a vengeance if the proposed merger with Security Pacific Corp. succeeds.

The merger proposal, announced Aug. 12, also will enable BankAmerica Corp., the parent company, to tap into the institutional and retail potential of Security Pacific's $6 billion Horizon mutual funds.

Institutional investors, however, believe it is too soon to say how the merger would affect them, except that a stronger bank would be able to better maintain good services. And those familiar with the banks say the merger would be a good fit in many areas.

"We don't think there is any overlap in the institutional business," said an officer of Security Pacific Investment Management Group, who asked not to be identified because, he said, jobs had been threatened for talking to the press.

According to information supplied to *Pensions & Investments*, Security Pacific Investment Group [illegible]ven subsidiaries manage[illegible] billion in institutional, tax-exempt discretionary assets as of Jan. 1; Bank of America managed $2.3 billion.

As of June 30, Security Pacific oversaw $22 billion in domestic master trust business, $55 billion in domestic master custodial accounts and $2.5 billion in global custody assets for U.S. tax-exempt clients.

As of June 30, 1990, the most recent data obtainable, Bank of America had $2.1 billion in domestic master trust, $16 billion in master custodial assets and $2 billion in global custody assets for U.S. tax-exempt clients.

"They get back into the trust business," said Mark Tonucci, vice president and bank analyst with The Keystone Group, Boston. Perhaps more important, he said, is that the new bank will have access to all the retail and distribution channels that will accrue from Security Pacific's proprietary mutual funds.

"Looking down the road, that could be more lucrative than the trust business," he said, referring to mutual funds' growing use in 401(k) plans and other employee

See **Banks** *on page 35*

State Street Research for sale

By Terry Williams

BOSTON — Investors are lined up to buy State Street Research & Management Co. from its parent, Metropolitan Life Insurance Co. First in line is United Asset Management.

If negotiations with UAM fail, Metropolitan Life and State Street Research management will consider offers from other, unidentified suitors.

If no suitor wins the company, Met Life could reduce its 100% ownership of the firm, which has $15 billion in assets under management, and give State Street Research employees an equity stake and the greater control and independence they desire.

A deal should be struck in the next couple of months, said a source familiar with the situation. "Definitely this fall, they will resolve this question, one way or another," said the source, who asked not to be identified.

Any sale of State Street Research requires approval of the firm's management, he said.

Met Life officials have told State Street Research clients the insurer is committed to giving management independence, the source said. "It added management wants a financial structure that would align its financial interest with the owner.

"People who think of owning businesses such as these must face that reality," he said. "The assets go down the elevator every night."

Franklyn Kettle, a spokesman for United Asset Management, declined to comment, as did representatives of Metropolitan Life and State Street Research.

According to the source, Metropolitan Life was not shopping the firm, but was approached by UAM and other suitors about a year ago.

Discussions with United Asset Management — the only suitor seriously considered — began last summer but ran aground by fall, according to the executive. They picked up again this spring and have reached a "fever pitch," he said. ■

BENEFITS

U.S. employers give workers fewer days at the beach

■ North America is clearly not the place for burned-out employees to be when vacation time rolls around.

While in the United States companies commonly allow two weeks of vacation at one year of service, countries where tenure has little to do with paid time-off arrangements offer as much as 30 days vacation for employees with one year of service, according to a Hewitt Associates survey.

The consulting firm, based in Lincolnshire, Ill., surveyed more than 900 major employers in the United States.

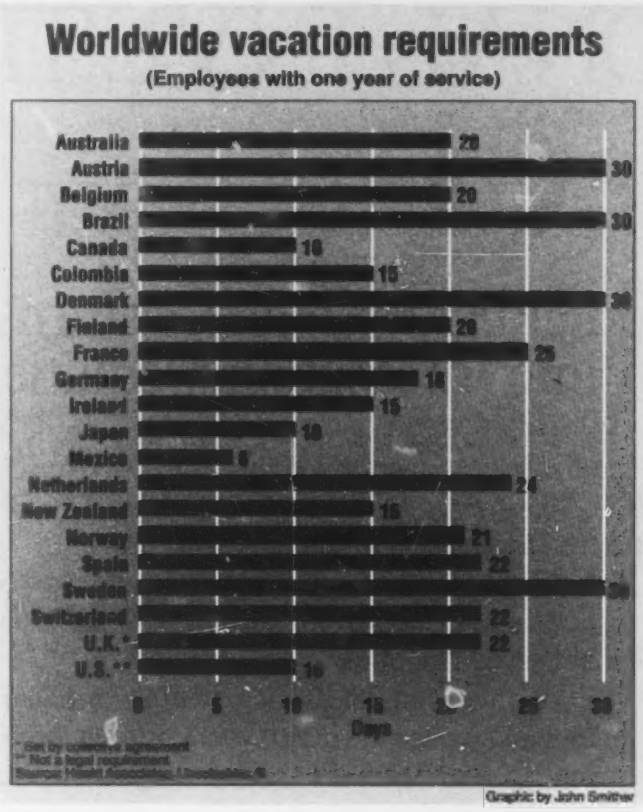
Austria, Brazil, Denmark and Sweden have the most generous employers, offering 30 days to employees with one year of service.

Mexican companies are even more frugal than their U.S. counterparts, offering only six days with one year of service.

While in the United States the length of service is the primary determinant of vacation time, in other countries vacation policy typically is government imposed.

In addition to paid vacation, employers in some regions, particularly Scandinavia, are required to pay for employee festivities. They must provide a cash "vacation bonus" that can amount to as much as 4% to 12% of an employee's annual pay.

— Marlene Givant Star



WASHINGTON

Congress backs off sanctions bill

■ A bill that would create sanctions against foreign money managers whose countries discriminate against U.S. money managers was dropped from key House legislation but still might be passed this year.

The "Fair Trade in Finance Services Act" could provide a big stick to wave at Japan and Korea. The main thrust of the bill would affect foreign banks and securities firms, but it also includes provisions that would permit the Securities and Exchange Commission to deny registration to money managers from countries that failed to provide U.S. managers equal access to their home market.

The bill would permit foreign managers that already have a U.S. presence to continue, but such firms could be prohibited from expanding their operations. The measure has been pushed by Sen. Donald Riegle Jr., D-Mich., and Sen. Jake Garn, R-Utah, the respective chairman and ranking minority member of the Senate Banking Committee, and has been passed by the Senate five times.

Despite being dropped Aug. 2 from a short-term extension of the Defense Production Act, H.R. 991, the proposed sanctions are included in the Senate banking reform legislation, which awaits a vote by the Senate in September.

— Joel Chernoff

FINANCING

Venture will advise troubled firms

■ Morris Anderson & Associates Ltd., a Rosemont, Ill., management consulting firm, and SPP Hambro & Co., New York, an investment banking boutique, have entered into an agreement to provide financial advisory and management consulting services to underperforming middle-market companies.

The joint venture Morris Anderson/SPP Hambro Financial Services, will provide services in the areas of crisis and turnaround management, debt restructuring, divestitures, mergers and acquisitions and capital raising.

The new organization will draw upon the more than 75 professionals of the two entities and maintain offices in New York, Chicago and Los Angeles.

SPP Hambro is the U.S. corporate finance affiliate of Hambros Bank Ltd., London.

Morris Anderson was seeking an investment bank to help clients that were ready to be sold or raise capital. SPP Hambro, which increasingly is involved in the financial end of company turnarounds, was looking for a firm that could provide expertise on the operations side.

"This will allow us to offer the full gamut of services to troubled companies or their constituencies," said Joseph D. Mark, managing director of SPP Hambro.

— Marlene Givant Star

REAL ESTATE

Sales don't support mall additions

■ Shopping centers still might be adding too much space at a time when growth in retail sales is flat, according to a report by Salomon Brothers Inc., New York.

The additions in retail space could indicate trouble for pension fund investors, who often buy shopping centers as a dependable source of investment return.

While the amount of new construction of retail space is declining compared with previous years, the amount of retail space being added through renovations is at a record pace, said the Salomon Brothers report, "Shopping Center Recycling: Deluges of Space — Delusions of Strong Returns."

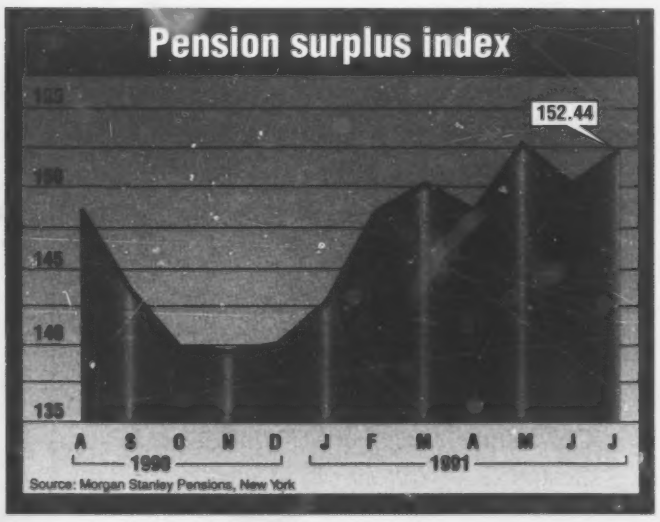
According to the report, "Net renovations to shopping centers as a percentage of total new construction reached an unprecedented 15% level in 1990, compared with the 11% to 12% peak of the 1970-'80 cycle."

In many instances, the value added through renovations of a retail center could be marginal and only prolong the glut of retail space, the report stated.

The price of retail centers also has been falling as investors demand greater yields on their investment, as much as 300 basis points on regional malls.

The Salomon Brothers report said, however, the initial yield increase sought from the top 10% of retail shopping centers is expected to increase only 50 basis points over the 5.5% to 6.5% yield sought in 1989.

— Steve Hemmerick



INTERNATIONAL

Canadian funds fail to surpass local yardsticks

■ The median Canadian pension fund posted an overall return of 0.2% in the second quarter, trailing local market indexes, according to the Canadian Trust Universe Comparison Service.

The funds' median domestic equity return matched the Toronto Stock Exchange 300 Index, at 0.3% for the quarter. The median bond return, 0.3%, trailed the Scotia-McLeod Inc. Universe Bond Index, which returned 0.5%.

The median return for foreign equities was −2.8%; this includes U.S. and non-North American markets. Canadian pension funds are limited to investing 10% of their assets in foreign equities. The Standard & Poor's 500 Stock Index declined 1.6% in Canadian dollar terms. The quarter's return, in Canadian dollar terms, for the Morgan Stanley Capital International Europe Australia Far East Index was not available.

For the year ended June 30, the median total fund returned 8.9%. Funds with a low allocation to equities outperformed those with higher commitments; those with less than 30% in equities had a median return of 9.7%, while those with more than 50% in equities earned a median 5.4%.

The funds' median Canadian equity return was 3.3% for the year, beating the TSE 300's 1.9%. The median bond return was 14.6%, slightly trailing the Scotia-McLeod's 15.3%. The median foreign equity return was 1.5%; the S&P 500 was up 5.5% in Canadian dollar terms, while the EAFE declined 13.2% when converted into Canadian currency.

— Trudy Ring

Douglas Graham says Pro*Stock data is reanalyzed nightly.

SOFTWARE

System now has daily data feature

■ Black River Systems Corp., Winston-Salem, N.C., has expanded the availability of its sophisticated master analytic stock selection system to users needing daily information on the stock market.

Prior to the release of its Pro*Stock system, Black River's Macro*World Investor module made available monthly financial forecasting, asset allocation and portfolio optimization modules. Pro*Stock gives portfolio managers access to its master system for detailed information on the 2,500 stocks on the New York and American exchanges as well as 200 commodity contracts, 12 exchange and interest rates and various market indexes.

The Black River modeling system provides specific buy-sell recommendations and a daily download of the most recent 60-day history of each stock along with the 30-day price forecast based on the model, according to Douglas Graham, Black River president.

"The system provides a daily action sheet with critical trading information and clear action signals based on the comprehensive analyses of the master system for each stock in an investor's portfolio," he said.

Information is reanalyzed nightly by the master system and downloaded in the user's PC before the market opens, he said.

— Fred Williams

MONEY MANAGERS

Professionals break away to start own advisory firms

■ Two new investment management firms have been launched by veteran portfolio managers.

Rebecca Garner, vice president with Associated Capital Investors, which managed general account assets for First Variable Life Insurance Co., Little Rock, Ark., has formed Garner Asset Management Corp., a fixed-income firm in Little Rock.

In Seattle, Steven Koenig, former portfolio manger with Franklin Research & Development Corp., Boston, has quit to form a new social investment management firm — Informed Investors Group — which will specialize in equities of companies based in the Pacific Northwest.

Garner Asset Management will be owned by the three principals, with Ms. Garner owning 70%. Garner will manage the $170 million First Variable general account.

Ms. Garner said she will be joined by Carl Pellegrini, founder and owner of Analytics Inc., a Dallas-based economic services firm providing fundamental and technical analysis that will be folded into Garner.

Glen E. Atkins, research director at First Variable, will serve as Garner's director of research. She said her firm will specialize in "basic fixed-income and bond management" and will use a value income approach to investing in the bond market.

She said core fixed-income portfolios — her specialty — "aren't terribly exciting, but they are something pension plan sponsors appreciate."

Mr. Koenig said Informed Investors' clients can tailor their portfolios "to include companies which are producing goods and services compatible with their beliefs and desires, while not sacrificing investment return."

Ruben Porter, a former analyst at Franklin, also is a principal at Informed Investors.

In addition, Mr. Koenig said, the firm will work with its clients in the shareholder rights area.

— Fred Williams

Rebecca Garner's new firm will specialize in core fixed-income portfolios.

INTERNATIONAL

U.K. public funds' returns strong

■ For both longer and shorter terms, U.K. public pension funds' performance has bested those of U.K. funds overall.

The WM Co., Edinburgh, Scotland, studied 91 local authority superannuation funds with combined assets of almost $59 billion. The firm found that in the year ended March 31, these funds posted an 8.3% return vs. 8.1% for all British pension funds. The funds comprise about 14.2% of all U.K. pension assets in WM's universe.

For the nine years ended in March, local authority funds rang up a 16.9% annualized return, vs. 16.5% for all U.K. funds.

According to WM, the returns of U.K. property were pivotal factors behind local authority funds' returns. As a WM report stated: "Property has underperformed all other categories over the most recent year and the longer term."

At the end of March, local authority funds had only a 5% exposure to property compared with the 8% exposure by all U.K. funds.

— Margaret Price

Asset mix changes

All U.K. funds vs. local authority funds

	As of March 28, 1991		As of March 31, 1992	
	All U.K.	Local authority	All U.K.	Local authority
Overseas equities	21	21	12	9
Overseas bonds	4	4	0	0
Cash and other	6	7	4	3
Overseas property	0	0	0	0

FOR THE RECORD

This investment portfolio is horse of a different color

■ Who says crime doesn't pay?

Pension Fraud paid handsomely for a number of investors on Monday, July 29.

In fact, it paid $4 for every $2 invested. Pension Fraud finished third in the fourth race at Saratoga, New York, that day.

The horse was named by its owner for a friend — a union official — who was being investigated by the government. In another jab at his friend, the owner named another horse Fingers in the Till.

The union official eventually was cleared of any wrongdoing.

— Mike Clowes

INVESTING

A possible nadir for bank earnings

■ The U.S. banking industry's performance might have bottomed out, as second-quarter earnings were well above lows registered in past quarters.

A study by Keefe, Bruyette & Woods Inc., New York, the largest broker/dealer specializing in bank securities, shows aggregate net income before extraordinary items totaled $2.9 billion during the quarter, representing a nearly 24% decline from the $3.8 billion earned by the banks a year ago and 17% below first-quarter 1991's $3.5 billion.

Still, the figures far exceed the $363 million earned in the fourth quarter of 1990 and the $2 billion earned in the third period. "This may indicate that the third and fourth quarters of last year were the earnings trough for the industry," said Donald K. Crowley, executive vice president and associate director-research for the firm.

The median return on assets for the more than 140 banking companies was 0.86% and the median return on equity was 12.6%. That's still short of the year-earlier levels of 0.9% ROA and 13.6% ROE but favorable compared with first-quarter levels of 0.84% and 12.5% respectively.

"The national recession is making it hard for banking companies to re-establish any strong upward momentum," said Mr. Crowley.

— Marlene Givant Star

REAL ESTATE

NAREIM tackles issues in property valuation debate

■ The National Association of Real Estate Investment Managers, whose members manage $3 trillion in real estate, thinks it might have the solution to the controversy on how to value properties held by pension funds and other investors.

Some pension officers have stoked the valuation controversy by complaining real estate money managers have simply overvalued properties they manage for pension funds, sometimes to boost the revenue generated by management fees. Some managers base their fees on the appraised value of properties they manage in commingled funds or separate accounts.

The suspicion about inflated appraisals has led some pension funds to pull assets from commingled real estate funds, or to not invest with the funds or in real estate at all, according to pension consultants.

But money managers have countered that the pension officers and some property appraisers have confused the market value of properties with liquidation value, the value of a property in a quick, forced sale.

The controversy has been so damaging to money managers that NAREIM's marketing forum asked the group's executive committee to draw up a position paper regarding the valuation policy on properties.

The executive committee recommended the current or market value of real estate be set at the best estimate of what a property would sell for under current market conditions within a one-year period when there is no "undue stimulus" affecting the sale.

Vince Martin, a managing director of TCW Realty Advisors, Los Angeles, and chairman of NAREIM, said it is "very interesting and enlightening to see such extensive agreement" among NAREIM members.

— Steve Hemmerick

RATINGS

Moody's the first to enter growing German market

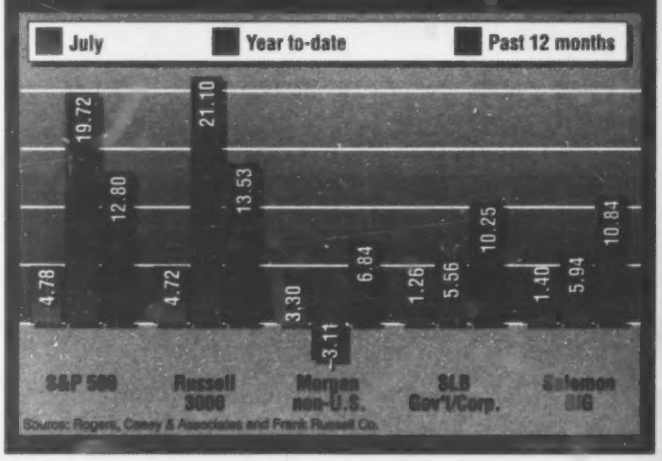
■ The first rating agency in the Federal Republic of Germany has been established by Moody's Investors Service. The agency, to be based in Frankfurt, will be known as Moody's Deutschland GmbH.

The agency is being formed in response to requests for independent credit ratings on the growing number of issues and issuers in Germany's debt markets — particularly the newly established deutsche mark commercial paper sector. Moody's Deutschland will operate in concert with the firm's offices in London, Paris, New York, Sydney and Tokyo.

— Marlene Givant Star

Pensions & Investments' indexes

The P&I monthly indexes track changes in the Standard & Poor's 500 Stock Index, Frank Russell Co.'s Russell 3000 Stock Index, the J.P. Morgan non-U.S. Government Bond Index, the Shearson Lehman Brothers Government Corporate Bond Index and the Salomon Brothers Broad Investment Grade Bond Index.



Source: Rogers, Casey & Associates and Frank Russell Co.

Managers find junk useful

Rebound in high-yield prices propels performance

By Terry Williams

Junk bonds provided the most interesting story in the second quarter, as fixed-income funds in both the PIPER and PIPER+ surveys used the much maligned securities to reach the top spot for the period.

PIPER — Pensions & Investments' Performance Evaluation Report — measures the returns of bank and insurance company commingled accounts. PIPER+ measures the performance of investment management firms. The reports are compiled by Rogers, Casey & Associates, Darien, Conn.

Atlanta-based Bell Capital Management's managed bond portfolio capped off steady performance during the five-, three- and one-year periods with a return on investment of 7.5% in the second quarter to lead the PIPER+ universe. The median return for the quarter was 1.7%.

For the year ended June 30, the managed bond portfolio posted a return of 28.4%, good for second place; for the three years it was 14%, good for another appearance as runner-up; and 12.5% for the five years for — what else — second place. (All returns for periods of more than one year are compound annualized.)

The Dimension Fund — sponsored by Connecticut Mutual Life Insurance Co., Hartford, and managed by Delaware Investment Advisers of Philadelphia — posted a return of 8.1% for the quarter to lead PIPER. The median return for the quarter was 1.77%.

Its performance over longer time periods was more reflective of the trauma in the junk market. The fund invests only in junk securities, although conservatively by investing in the securities of companies still performing. For the one- and three-year periods, Dimension was in the bottom decile ranking of the PIPER fixed-income universe, posting respective return on investments of 4.96% and 4.93%.

But after getting the bum's rush for the latter part of the '80s and most of 1990, junk bond prices began to rise in the fourth quarter, and junk bonds provided the highest fixed-income returns in the PIPER universes for the first half of 1991.

Highly correlated with equities, the junk bond market grabbed onto the coattail of the stock market and was pulled along during its rise following the start of Operation Desert Storm in January.

The Dimension fund, a $20.1 million specialty fund in Connecticut Mutual Life's separate account group, owned the high-yield debt of operating companies, and capitalized on the strengthening high-yield market.

Among Dimension Fund's holdings are the debt of **Lomas Financial Corp.**, **Wang Labs Inc.**, **Navistar Financial Corp.** and **Owens Corning**, according to Maureen Ford, vice president.

Coupons of the top 10 holdings, which make up 25.6% of the portfolio, range between 9% and 13%.

Although Bell's managed bond portfolio used the same asset class as Dimension to top its universe in the second quarter, it employed an entirely different method.

Using interest rate anticipation as its primary research tool, Bell seeks to invest in bond mutual funds when there are indications that bond prices will rise, according to Tom Comsudes, vice president.

The firm divides its market into four sectors: governments, investment-grade corporates, high-yield corporates and convertible bonds, and it expects to be in and out of these sectors at least four times per year.

When it buys, it allocates a minimum of 50% of assets to a sector. The remaining 50% may be held in cash or one of the three remaining sectors, depending on the firm's outlook.

The managed bond portfolio now is 100% invested in high-yield mutual funds and has been since Jan. 29.

The decision to do so was driven by Bell's technical analysis of the high-yield sector, not interest rate anticipation.

"The high-yield market showed strength," said Mr. Comsudes. "Whether it was because of Desert Storm or other factors, it was technically showing strength.

"Government bonds were not attractive. Investment-grade corporates weren't attractive."

Mr. Comsudes said the $80 million portfolio does not buy individual issues of bonds because it can get more attractive prices using mutual funds, it saves on brokers commissions, it minimizes default risk and it's easier to get out of the market when bond prices fall.

With high-yield bonds, mutual funds provide liquidity in a volatile market, he said. ■

PIPER fixed-income funds

Periods ended June 30

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
First quartile	2.06	10.86	10.06	8.76	13.33
Third quartile	1.51	9.72	9.15	7.95	11.80
SLB G/C	1.51	10.22	9.87	8.33	13.19

PIPER equity funds

Periods ended June 30

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
First quartile	0.49	9.80	15.13	11.86	15.95
Third quartile	-1.47	5.01	11.30	9.05	13.54
S&P 500	-0.24	7.40	14.63	11.91	15.58

PIPER special equity funds

Periods ended June 30

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
First quartile	2.46	15.93	15.55	12.55	16.36
Third quartile	-2.41	4.47	7.89	7.82	12.12
S&P 500	-0.24	7.40	14.63	11.91	15.58

PIPER+ fixed-income funds

Periods ended June 30

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
First quartile	1.97	11.08	10.28	9.21	14.10
Third quartile	1.44	9.61	9.19	8.22	12.43
SLB G/C	1.51	10.22	9.87	8.33	13.19

PIPER+ equity funds

Periods ended June 30

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
First quartile	0.99	11.52	16.40	13.13	17.71
Third quartile	-2.09	4.82	10.81	9.65	14.60
S&P 500	-0.24	7.40	14.63	11.91	15.58

PIPER+ special equity funds

Periods ended June 30

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
First quartile	5.40	12.58	13.11	10.88	17.09
Third quartile	-2.95	3.72	6.97	7.04	13.06
S&P 500	-0.24	7.40	14.63	11.91	15.58

Mortgage funds tops in real estate universe

By Steve Hemmerick

The plunge in real estate values has made mortgage funds one of the best performing investments in real estate, but pension investors have put very little money in them.

One mortgage fund, The Prudential Realty Group's Union Mortgage Account has scored in the top 10% of investment performance for the quarter, the year and the three years ended March 31, according to Pensions & Investments' Performance Evaluation Report.

The $148 million UMA open-end commingled real estate fund scored a total return of 3.73% for the quarter, 13.57% for the year and 11.64% for three years. (All returns for periods of more than one year are compound annualized.)

The UMA fund achieved about three times the median quarter return, 1.21%; about 10 times the one year median return, 1.26%; and almost three times the three-year median return, 4.65% for open-end real estate funds.

Most of the return from straight mortgage funds and participating mortgage funds return is fixed. When property values fall the investment return from mortgage funds doesn't necessarily fall, provided the borrower is able to pay the debt.

UMA invests primarily in fixed-rate, straight mortgages and construction loans on properties to be built or substantially renovated by contractors employing 100% union labor.

An open-end fund that invests 70% of its assets in participating and convertible mortgages, New York-based UBS Asset Management's CMB Fund is a top performer in the shorter and longer terms.

The $110 million UBS fund returned 2.48% in the quarter, 3.52% for the year, 8.1% for three years and 10.7% for five years. UBS Asset Management is the investment management subsidiary of Union Bank of Switzerland, Zurich.

A Prudential Realty Group participating mortgage fund, Preference Investment Mortgage Account, also soundly beat the open-end median returns, but by a narrower margin than Prudential's UMA. PRIMOR returned 2.28% for the quarter, 7.37% for the year and 7.26% for three years.

A closed-end mortgage account also has had high returns. INVESCO Realty Advisors, Dallas, Mortgage Fund I with only $18 million in assets has returned 2.41% for the quarter, 3.43% for the year and 11.06% for three years.

For closed-end funds, the INVESCO participating mortgage fund had almost twice the median return for the quarter, 1.26%; more than four times the one year median return, 0.83%; and almost two times the three year median return, 6.18%.

Yet pension funds have put little money in mortgage funds, partly because of the pension investment "infrastructure," according to Paul Saint-Pierre, president of Pension Realty Advisors, San Francisco.

Many real estate money mangers didn't market mortgage funds enthusiastically to the pension community and many consultants didn't recommend them like they did equity real estate funds, said Mr. Saint-Pierre. Another problem, he said, was that pension officers couldn't decide whether mortgage funds were a bondlike investment or a real estate investment. As a result, mortgage funds "fell through the cracks," he said.

Of the more than 100 commingled real estate funds in PIPER, fewer than 10 are mortgage funds and most of them are small, some tiny, in asset size in comparison with equity real estate funds.

As of June 30, 1990, real estate money managers reported $129 billion under management, but only $6 billion in mortgages, and most of the mortgage investments were part of investment by equity funds.

At UBS Asset, Russell Blumenthal, a vice president, said UBS hasn't focused on marketing its mortgage fund because it has concentrated on its seven real estate separate account clients of Middle East and Japanese institutional investors.

Kevin Smith, a vice president and portfolio manager with Prudential Realty Group, Newark, N.J., said pension fund officers

See **PIPER** *on page 28*

Top decile PIPER commingled fixed-income funds

3-month returns

	%
Connecticut Mutual (Dimension)	8.1
Wellington Trust (Emerg.), Mass.	7.8
Second Nat'l Bank, Ohio	7.7
Northern Trust (Inter.), Ill.	3.7
Princeton Bank, N.J.	3.5
Greeley Nat'l, Colo.	3.2
Beverly Trust, Ill.	3.1
AmSouth (Ltd. mat.), Ala.	3.1
Cullen Bank, Texas	3.0
Wesbanco Wheeling, W. Va.	2.9
Bankers Trust (Short/inter.), N.Y.	2.9
The Phoenix (Mgd.), Conn.	2.8
Northern Trust, Ill.	2.7
Security Nat'l (II), W. Va.	2.7
First Security Nat'l (F), Ky.	2.6
Union Capital (Short int.), Calif.	2.6
First Nat'l Litchfield (CTF A), Conn.	2.6
Sanwa Bank (C), Calif.	2.5
Mercantile Bank Joplin (B), Mo.	2.5
Union Central, Ohio	2.5
Penn Mutual (S.A. C), Pa.	2.5
Fifth Third Bank-Toledo (F), Ohio	2.5
Hibernia Nat'l (Inter.), La.	2.5
Lake Shore Nat'l, Ill.	2.5
First Nat'l of Amarillo, Texas	2.5
Prudential (PRIVEST), N.J.	2.5
Central Fidelity (Short), Va.	2.4
SLB G/C	**1.5**

1-year returns

	%
Second Nat'l Bank, Ohio	13.5
Penn Mutual (S.A. C), Pa.	13.3
Northern Trust, Ill.	13.3
Princeton Bank, N.J.	12.9
PW Trust (Conserv.), N.J.	12.5
Life of Virginia	12.5
First Nat'l of Amarillo, Texas	12.4
J.P. Morgan, N.Y.	12.3
NCNB Texas (Mtg. backed)	12.3
First Nat'l of Maryland	12.1
Cullen Bank, Texas	12.1
Aetna Life (Inc. shares), Conn.	12.1
Union Central, Ohio	11.9
Merchants Nat'l, Ind.	11.8
J.P. Morgan (Tact. duration), N.Y.	11.8
UBS Asset (CMB sec. mtg.), N.Y.	11.7
Northern Trust (Inter.), Ill.	11.7
Calcasieu Marine (E), La.	11.7
Ameritrust (RT GNMA), Ohio	11.7
Sun Bank, Fla.	11.6
Wellington (Enhanced), Mass.	11.5
Old Second Nat'l, Ill.	11.5
Nat'l Bank of Detroit	11.4
LaSalle Nat'l (Gov't/mtg.), Ill.	11.4
Citytrust (E3), Conn.	11.4
Sovran Capital, Va.	11.4
First Tennessee Bank	11.3
SLB G/C	**10.2**

5-year returns

	%
Meridian, Pa.	10.6
Transamerica Life (S.A. T2), Calif.	10.3
Bankers Trust (Mtg. pass), N.Y.	10.2
Beverly Trust, Ill.	10.1
General American (S.A. 6), Mo.	10.1
NCNB Texas (Mtg. backed)	9.9
Aetna Life (Inc. shares), Conn.	9.9
General American (S.A. 9), Mo.	9.9
First Nat'l of Amarillo, Texas	9.9
Sanwa Bank (C), Calif.	9.8
LaSalle Nat'l (Gov't/mtg.), Ill.	9.7
J.P. Morgan, N.Y.	9.7
IAA Trust (B), Ill.	9.6
Cullen Bank, Texas	9.6
Second Nat'l Bank, Ohio	9.6
UBS Asset (CMB Sec. mtg.), N.Y.	9.6
First Nat'l of Maryland	9.5
Mercantile Safe, Md.	9.5
Harris Trust, Ill.	9.5
Pacific Financial, Calif.	9.4
The Principal, Iowa	9.4
Columbus Bank, Ga.	9.4
Marinvest, N.Y.	9.3
Sovran Capital, Va.	9.3
Chancellor (Mtg. sec.), N.Y.	9.3
SLB G/C	**8.3**

10-year returns

	%
Transamerica Life (S.A. T2), Calif.	16.1
Meridan, Pa.	15.7
United Capital, Colo.	15.3
Boatmen's Trust (F), Mo.	15.0
Life of Virginia	14.8
Beverly Trust, Ill.	14.7
IAA Trust (B), Ill.	14.6
Sovran Capital, Va.	14.4
ASB Capital, D.C.	14.3
First Kentucky Trust	14.3
Sanwa Bank (C), Calif.	14.3
First Nat'l of Amarillo, Texas	14.3
Pacific Financial, Calif.	14.2
J.P. Morgan, N.Y.	14.1
Bankers Trust (Mtg. pass), N.Y.	14.1
Society Nat'l, Ohio	14.0
Aetna Life (Inc. shares), Conn.	13.9
SLB G/C	**13.2**

Top decile PIPER commingled equity funds

3-month returns

	%
First Nat'l of Elgin (C), Ill.	5.6
State Bank (C), Ohio	4.9
First Nat'l of Elgin (A), Ill.	4.9
CL Capital, Ga.	4.9
Sunburst Bank, Miss.	4.7
Boatmen's (Value), Mo.	4.5
Second Nat'l Bank, Ohio	4.5
Sun Bank (Income), Fla.	4.4
Pacific Fin. (Divers. low p/e), Calif.	4.1
U.S. Nat'l Bank, Texas	3.7
Provident Capital, Pa.	3.4
Wilmington Trust (V), Del.	2.9
Wesbanco Wheeling (B), W.Va.	2.9
Boatmen's (Value plus), Mo.	2.8
New York Life (Value S.A. 6)	2.7
Mercantile Safe (2nd Cent.), Md.	2.7
Mississippi Valley, Mo.	2.6
The Principal, Iowa	2.6
Fifth Third Bank-Toledo, Ohio	2.5
Merus Capital (Income), Calif.	2.5
Pacific Fin. (Income), Calif.	2.3
Pacific NW Trust, Ore.	2.1
Norwest Bank, Minn.	2.1
First Nat'l of Omaha (D), Neb.	2.1
PRIFORM Invst., N.J.	2.1
NBD Trust, Ill.	2.1
Banc One Asset (Special), Ohio	2.0
Mercantile Safe, Md.	2.0
Team Bank (Value), Texas	1.9
Fifth Third Bank (Mid. cap.), Ohio	1.9
S&P 500	**-0.2**

1-year returns

	%
Second Nat'l Bank (Gro.), Ohio	23.8
Fifth Third Bank-Toledo, Ohio	19.7
Chancellor (Gro.), N.Y.	19.5
Bank of the West, Calif.	19.3
Pacific Fin. (Income), Calif.	19.3
Sun Bank (Income), Fla.	19.0
Chancellor (Sel. gro.), N.Y.	18.2
NBD Trust, Ill.	17.1
Fifth Third Bank (Mid. cap.), Ohio	16.6
U.S. Nat'l Bank, Texas	16.5
Team Bank (Value), Texas	15.8
Norwest Bank, Minn.	15.7
Sentry Equity (S.A. B), Wis.	15.6
Pacific Financial (Divers. low p/e)	15.0
Team Bank (Gro.), Texas	14.8
American Nat'l Bank, Ind.	14.2
Pacific NW Trust, Ore.	13.7
The Phoenix (Gro. S), Conn.	13.7
New York Life (S.A. 1)	13.7
Liberty Nat'l, Okla.	13.5
Merus Capital (Sp. gro.), Calif.	13.3
LaSalle Street (Intrinsic value), Ill.	13.3
United Carolina, N.C.	13.1
Mercantile Safe (2nd. Cent.), Md.	12.9
Mercantile Safe, Md.	12.9
Sovran Capital, Va.	12.9
CL Capital, Ga.	12.7
First Midwest Asset, Ill.	12.7
The Phoenix, Conn.	12.7
John Hancock (Divers. 1K), Mass.	12.6
S&P 500	**7.4**

5-year returns

	%
Chancellor (Sel. gro.), N.Y.	18.2
Pacific Fin. (Sm. cap.), Calif.	16.5
Sun Bank, Fla.	16.4
The Phoenix (Gro. S), Conn.	16.4
Wesbanco Wheeling (B), W.Va.	16.2
State Street (Matrix syn.), Mass.	16.1
IDS Trust (Core gro.), Minn.	15.5
Chancellor (Gro.), N.Y.	15.4
John Hancock (Divers. 1K), Mass.	15.3

Bank One-Indianapolis (L)	15.1
First Nat'l Amarillo, Texas	15.0
Lincoln Nat'l (Select), Ind.	15.0
U.S. Nat'l Bank, Texas	15.0
Pacific Fin. (Income), Calif.	14.7
Meridian, Pa.	14.7
Mark Twain Bank, Mo.	14.6
The Phoenix, Conn.	14.2
Bank One Wis. Trust (Growth)	14.1
Pacific Fin. (Cap. apprec.), Calif.	13.9
First Illinois (Corp.)	13.8
First Illinois (Personal)	13.6
NCNB Nat'l Bank (Growth), N.C.	13.6
Aetna Life (S.A. 2), Conn.	13.5
Shearson Trust (EF7), Del.	13.4
Sovran Capital, Va.	13.4
Chancellor (Styleshift), N.Y.	13.4
S&P 500	**11.9**

10-year returns

	%
Sun Bank, Fla.	23.7
Pacific Fin. (Cap. apprec.), Calif.	20.4
First Nat'l Amarillo, Texas	19.1
U.S. Nat'l Bank, Texas	18.2
Wesbanco Wheeling (B), W.Va.	18.1
Provident Mutual (S.A. 1), Pa.	18.0
First Union Nat'l, N.C.	17.9
Nationwide Life, Ohio	17.7
Merus Capital (Income), Calif.	17.7
Chancellor (Gro.), N.Y.	17.4
Connecticut Mutual	17.4
Merus Capital (Gro. plus), Calif.	17.4
Manufacturer Affiliate (Gro.), Ill.	17.3
Manufacturers Detroit (E)	17.3
Markston Invst. (Lt. gro.), N.Y.	17.2
John Hancock (Divers. 1K), Mass.	17.2
First NH Invst. (Value)	17.1
First Security Nat'l (D), Ky.	17.1
New England (Cap. gro.), Mass.	17.1
S&P 500	**15.6**

An in-depth, comprehensive look at financing and investment opportunities in post-1992 Europe will be the subject of the special report in the Oct. 28 issue of *Pensions & Investments*.

Top decile PIPER commingled special equity funds

3-month returns

	%
Assoc. Bank-Neenah (Reg. bank)	13.5
Wellington Trust (Sp. sit.), Mass.	8.6
Trust Co./West (High yield), Calif.	6.7
First Variable (High yield), Ark.	6.3
Comerica, Mich.	5.5
Markston Invst. (V.A. 15), N.Y.	4.8
Society Nat'l (Central val.), Ohio	4.0
NBD (Opportunity), Mich.	4.0
S&P 500	**−0.2**
Russell 2000	**−1.6**

1-year returns

	%
Chancellor (Emerg. health), N.Y.	50.0
Equitable Capital (Convert.), N.Y.	31.0
Princeton Bank (Em. gro.), N.J.	30.9
First Wis. Asset (Emerg. gro.)	28.1
Equitable Capital (Gro. 3), N.Y.	27.3
UBS (CMB sm. cap. gro.), N.Y.	24.2
Markston Invst. (V.A. 15), N.Y.	22.9
S&P 500	**7.4**
Russell 2000	**1.2**

5-year returns

	%
Chancellor (Emerg. health), N.Y.	15.2
Wellington Trust (Sp. sit.), Mass.	14.9
Equitable Capital (Convert.), N.Y.	14.7
Connecticut Nat'l Bank	14.7
Shearson Trust (EF5), Del.	14.5
Meridian, Pa.	14.3
S&P 500	**11.9**
Russell 2000	**3.8**

10-year returns

	%
Connecticut Nat'l	18.6
Norwest Bank, Minn.	17.9
First Wis. Asset (Sm. gro. B)	17.2
S&P 500	**15.6**
Russell 2000	**9.9**

Top half PIPER commingled international funds

3-month returns

	%
Global Fixed Income (Yield), N.J.	0.4
Wellington (Pacific Basin), Mass.	0.3
CIGNA Int'l (Fixed), Conn.	0.2
Mass. Financial (Global fixed)	0.2
NCNB Nat'l Bank (Eq.), N.C.	0.1
Union Bank (Eq.), Calif.	0.0
J.P. Morgan (Bond), N.Y.	−0.1
Citibank Invst. (Fixed), N.Y.	−0.3
Ameritrust Texas (Bond)	−0.4
Trust Co./West (Global), Calif.	−0.6
New York Life (S.A. 11)	−0.6
Wellington (Emerg. stock), Mass.	−0.7
Global Fixed Income (Bond), N.J.	−0.8
Travelers (Bond index), Conn.	−0.8
Lincoln Nat'l (S.A. 22), Ind.	−0.9
Boatmen's Trust (Eq. W), Mo.	−1.2
Putnam Cos. (Eq.), Mass.	−1.3
CL Capital (Stock), Ga.	−1.3
Global Fixed Income (Bond), N.J.	−1.8
Connecticut Mutual (Overseas)	−1.8
IAA Trust (CTF/I), Ill.	−2.3
J.P. Morgan (Eq.), N.Y.	−2.3
MSCI World	**−3.2**
FTA World	**−3.3**
MSCI EAFE	**−5.4**
FTA Europe & Pacific	**−5.6**

1-year returns

	%
J.P. Morgan (Bond), N.Y.	16.7
Citibank Invst. (Fixed), N.Y.	15.0
Ameritrust Texas (Bond)	11.6
CIGNA Int'l (Fixed), Conn.	10.8
Global Fixed Income (Bond), N.J.	9.9
Mass. Financial (Global fixed)	9.8
Global Fixed Income (Bond)	9.0
Trust Co./West (Global), Calif.	6.6
Global Fixed Income (Yield), N.J.	6.4
Boatmen's Trust (Eq. W), Mo.	1.4
IAA Trust (CTF/I), Ill.	−0.4
Connecticut Mutual (Overseas)	−0.7
CIGNA Corp. (Eq.), Conn.	−1.4
CL Capital (Stock), Ga.	−2.1
Lincoln Nat'l (S.A. 22), Ind.	−4.0
FTA World	**−4.0**
MSCI World	**−4.3**
Wellington (Pacific Basin), Mass.	−5.4
J.P. Morgan (Eq.), N.Y.	−5.5
NCNB Nat'l Bank (Eq.), N.C.	−5.6
Provident Capital (Low p/e), Pa.	−5.9
Union Bank (Eq.), Calif.	−6.6
Putnam Cos. (Eq.), Mass.	−6.9
The Principal (Stock), Iowa	−7.1
FTA Europe & Pacific	**−11.0**
MSCI EAFE	**−11.2**

5-year returns

	%
CIGNA Corp. (Eq.), Conn.	16.8
CL Capital (Stock), Ga.	15.9
Provident Capital (Low p/e), Pa.	14.9
Global Fixed Income (Bond), N.J.	14.7
Wellington (Pacific Basin), Mass.	13.4
Lincoln Nat'l (S.A. 22), Ind.	13.1
J.P. Morgan (Bond), N.Y.	12.1
Global Fixed Income (Yield), N.J.	12.1
Bankers Trust (Eq.), N.Y.	12.0
Putnam Cos. (Eq.), Mass.	11.9
NCNB Nat'l Bank (Eq.), N.C.	11.7
Citibank Invst. (Fixed), N.Y.	11.6
U.S. Trust, N.Y.	11.3
Wellington (Stock), Mass.	11.1
Wells Fargo (Eq. index), Calif.	11.0
FTA Europe & Pacific	**10.9**
MSCI EAFE	**10.8**
FTA World	**10.7**
MSCI World	**10.7**

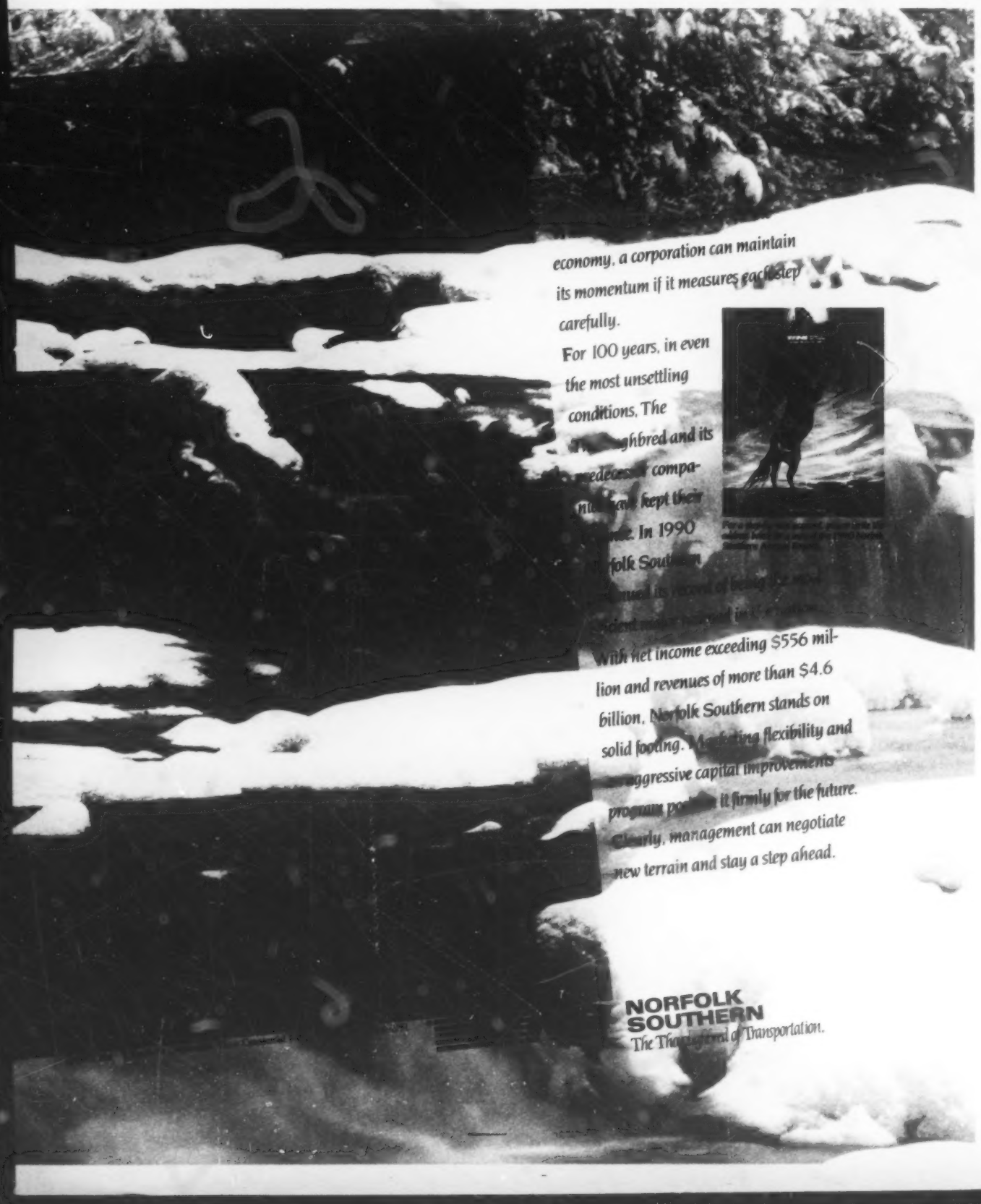
10-year returns

	%
Putnam Cos. (Eq.), Mass.	17.5
MSCI EAFE	**17.2**
Bankers Trust (Eq.), N.Y.	17.1
FTA Europe & Pacific	**17.0**
IDS Int'l (Eq.), Minn.	16.6
Boatmen's Trust (Eq. W), Mo.	16.0
Wells Fargo (Eq. index), Calif.	15.9
MSCI World	**15.7**
U.S. Trust, N.Y.	15.6
FTA World	**14.0**

Top decile PIPER + fixed-income funds

3-month returns

	%
Bell Capital (Mgd.)	7.5



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We are pleased to announce that

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Perpetual Advisory (Stamp)	6.9
Scheetz, Smith & Co.	3.7
Loomis, Sayles (Disc.)	3.6
Washington Square (Broad)	3.4
Loomis, Sayles-Pasadena	3.2
Pierson Capital	3.1
Union Capital (Short inter.)	2.6
Income Research (Enhan. cash)	2.5
Pacific Invst. (Low dur.)	2.5
Pension Mgmt.	2.5
JMC Capital	2.5
Western Asset (Ltd. mat.)	2.5
Philadelphia Invst.	2.5
Jamison Eaton Wood (Lg. public)	2.4
Morgan Grenfell Capital	2.4
Signet Asset (Enhanced)	2.4
Investment Advisors	2.4
U.S. Trust of California	2.4
Executive Invst.	2.4
Fox Asset	2.4
Income Research (Interm. dur.)	2.4
Merganser Capital (Interm.)	2.3
Denver Invst. (Interm.)	2.3
SunBank Capital (Corp.)	2.3
Mass. Financial (Ltd. maturity)	2.3
SLB G/C	**1.5**

1-year returns

	%
Perpetual Advisory (Stamp)	34.9
Bell Capital (Mgd.)	28.4
Miller Anderson & Sherrerd	24.1
Seaboard Invst.	15.7
Jamison Eaton Wood	14.4
Durkee Capital (Act. quant.)	13.5
McCowan Assoc.	13.2
Furman Selz Capital	13.0
Criterion Invst. (Mort.)	12.6
Washington Square (Broad)	12.6
JCW Invst. (Value)	12.4
Loomis, Sayles-Pasadena	12.3
Atlantic Port. Analytics (A)	12.3
Fox Asset	12.3
Morgan Grenfell Capital	12.3
Bear Stearns (Mtg. backed)	12.2
Jamison Eaton Wood (Lg. public)	12.1
Executive Invst.	12.0
Capital Guardian	12.0
Legg Mason Capital (Act.)	12.0
Standish, Ayer & Wood (Act.)	12.0
Pierson Capital	11.9
Kemper Asset Mgmt. (Plus)	11.9
Gardner Preston Moss (Rel. ret.)	11.8
Miller Anderson & Sherrerd (Mtg.)	11.8
U.S. Trust of California	11.7
SLB G/C	**10.2**

5-year returns

	%
Seaboard Invst.	15.1
Bell Capital (Mgd.)	12.5
Fox Asset	12.4
Morgan Grenfell Capital	11.9
Miller Anderson & Sherrerd	11.6
Durkee Capital (Act. quant.)	10.8
Meridian Invst.	10.6
Miller Anderson & Sherrerd (Mtg.)	10.4
Capstone Asset	10.4
Washington Square (Broad)	10.3
Philadelphia Invst.	10.2
McKee Invst.	10.2
Executive Invst.	10.1
Jamison Eaton Wood	10.0
Ferguson & Wellman (Int. rate)	9.9
Dolan Capital	9.9
Bridgewater Asset (Act. dur.)	9.8
Gardner Preston Moss (Rel. ret.)	9.8
U.S. Trust of California	9.8
Furman Selz Capital	9.8
Patterson Capital (Immed.)	9.7
SLB G/C	**8.3**

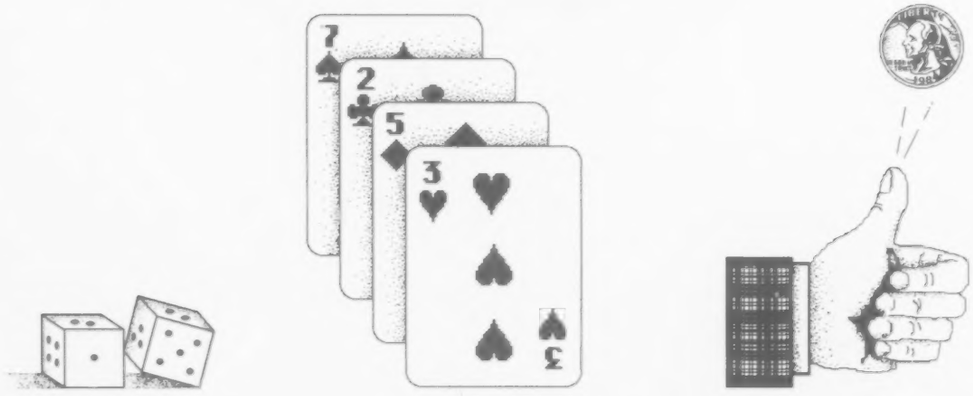
10-year returns

	%
Bridgewater Asset (Act. dur.)	18.9
Patterson Capital (Immed.)	16.7
Miller Anderson & Sherrerd	16.6
STW Fixed Inc. (Long comp.)	16.3
Morgan Grenfell Capital	16.3
Miller Anderson & Sherrerd (Mtg.)	15.9
Meridian Invst.	15.7
Smith Affiliated Capital	15.4
Rightime Econ. (Treas.)	15.3
Standish Ayer & Wood (Act.)	15.1
Wolf Webb Burk Campbell	15.1
Dolan Capital	15.0
Charles River (Act. inter. dur.)	15.0
Denver Invst. (Long term)	14.9
Consistent Asset (Total return)	14.9
SLB G/C	**13.2**

Top decile PIPER+ equity funds
3-month returns

	%
Edgar Lomax (Timing)	9.7
Westport Asset	8.6

Because your investment decisions are too important to be left to chance...



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Wilshire Asset (Sm. co. value)	6.3
Wedge Capital (Sm. cap. value)	5.5
Trinity Invst.	5.4
Pengra (Struct. demand)	5.3
Putnam Cos. (Sm. cap.)	5.1
Eagle Asset (Sm. cap.)	5.0
Fenimore Asset	5.0
Brandywine (Low p/e II/sm. cap.)	4.8
Neuberger Berman (Sm. cap.)	4.4
First Pacific Advisors (Dallas)	4.4
SunBank Capital (Income)	4.3
NFJ Invst. (Divers. low p/e)	4.0
Securities Res. (Putnam Voyager)	3.9
Goldman Asset (Segt. linked)	3.7
Wright Investor's (Sm. cap.)	3.7
Securities Res. (Kemper Summit)	3.6
IDS Advisory (Res. agg.)	3.6
Haven Capital	3.5
Standish Ayer Wood (Sm. cap.)	3.3
Sound Shore	3.3
Hotchkis and Wiley	3.2
Cohen, Davis & Marks	3.1
Equity Invst. (Growth)	3.1
General American (Closed end)	3.0
R.B. Haave Assoc.	3.0
Brandywine (Low p/e active)	2.9
Dietche & Field	2.8
American Income Plus	2.8
Cowen Asset (Inc. & gro.)	2.7
Montgomery (Sm. cap. gro.)	2.6
Nicholas Co.	2.6
Invista Capital (Cap. accum.)	2.6
Boatmen's Trust (Value plus)	2.6
TSA Capital (Act.)	2.6
Meridian Mgmt.	2.6
NFJ Invst. (Income)	2.5
Heine (Mutual shares)	2.5
Granahan Invst. (Explorer II)	2.4
Union Capital (Val. momentum)	2.4
NFJ Invst. (Sm. cap.)	2.4
Markston Invst. (MBL growth)	2.3
Pension Mgmt.	2.3
Heine (Mutual qualified)	2.3
S&P 500	**-0.2**

1-year returns

	%
Rothschild Asset (Val. growth)	41.8
Mt. Auburn Mgmt.	32.6
Cohen, Davis & Marks	28.6
Equitable Capital (Sp. gro. 3)	27.3
First Pacific (Dallas)	23.2
Beekman Capital (Growth)	22.9
Montgomery (Sm. cap. gro.)	22.5
Putnam Cos. (Sm. cap.)	22.3
Jundt Assoc. (Sm. cap.)	22.2
Wilke/Thompson (Sm. cap gro.)	21.9
Denver Invst. (Med. comp.)	21.9
Cheswick Invst.	21.4
Bear Stearns Asset	21.0
Dawson-Samberg (Gro. Pequot)	21.0
Neuberger Berman (Sm. cap.)	20.7
Rightime Econ. (Tactical)	20.5
IDS Advisory (Res. agg.)	20.5
Standish Ayer Wood (Sm. cap.)	20.2
Duncan/Hurst (Sm. cap. gro.)	19.6
Hatteras Capital	19.5
Morgan Stanley (Emerg. growth)	19.2
Capital Growth Mgmt.	19.1
SunBank Capital (Income)	18.9
Scudder Stevens Clark (Sm. co.)	18.8
Wright Investor's (Sm. cap.)	18.8
NFJ Invst. (Income)	18.5
Investment Advisers (Sm. cap.)	18.5
Granahan Invst. (Explorer II)	18.1
The Phoenix (Indiv. growth)	17.8
Brown Capital (Rel. value)	17.8
Wilke/Thompson (Growth)	17.6
Cooke & Bieler	17.0
Pacific Century (Sm cap. gro.)	17.0
Independence One	16.9
Hellman, Jordan	16.7
Galleon Capital (Gro./value)	16.7
Qualivest Capital (Agg.)	16.6
Hellman, Jordan (Acct. 25)	16.5
Severn Assoc. (I)	16.5
Pension Mgmt.	16.5
Systematic Financial (High cash)	16.4
Hutchinson Richardson	16.3
Montag & Caldwell	16.3
Provident Invst.	15.9
S&P 500	**7.4**

5-year returns

	%
Mt. Auburn Mgmt.	23.7
Kingsly Jennison McNulty Morse	22.1
Montgomery (Sm. cap. gro.)	21.2
Quantitative Asset (Enhan. index)	21.0
Cheswick Invst.	20.1
First Pacific Advisors (Dallas)	20.0
Jundt Assoc. (Sm. cap.)	19.3
WR Lazard (Growth)	19.2
Oak Assoc. (Firestone)	18.7
Hatteras Capital	18.7

Turner Invst.	18.3
Duncan/Hurst (Sm. cap. gro.)	17.9
C.H. Brown (Computer dir.)	17.8
Insight Capital (Sm. cap.)	17.8
Cowen Asset (Sm. cap.)	17.5
Dundee Partners	16.9
Institutional Capital	16.8
Friess Assoc.	16.8
Tukman Capital	16.8
Pension Mgmt.	16.7
State Street (Matrix syn.)	16.6
Bear Stearns Asset	16.6
Hellman, Jordan	16.5
Pacific Century (Sm. cap. gro.)	16.4
R.B. Haave Assoc.	16.3
Brinson Partners	16.3
Investment Counselors	16.2
Harris Bretall Sullivan & Smith	15.9
Hellman, Jordan (Acct. 25)	15.8
Argus Investors' (Lg. cap. divers.)	15.7
Systematic Financial (High cash)	15.6
UBS Asset-N.Y. (Sm. cap. value)	15.5
Investment Advisers (Sm. cap.)	15.5
J.M. Hartwell	15.5
Beekman Capital (Growth)	15.3

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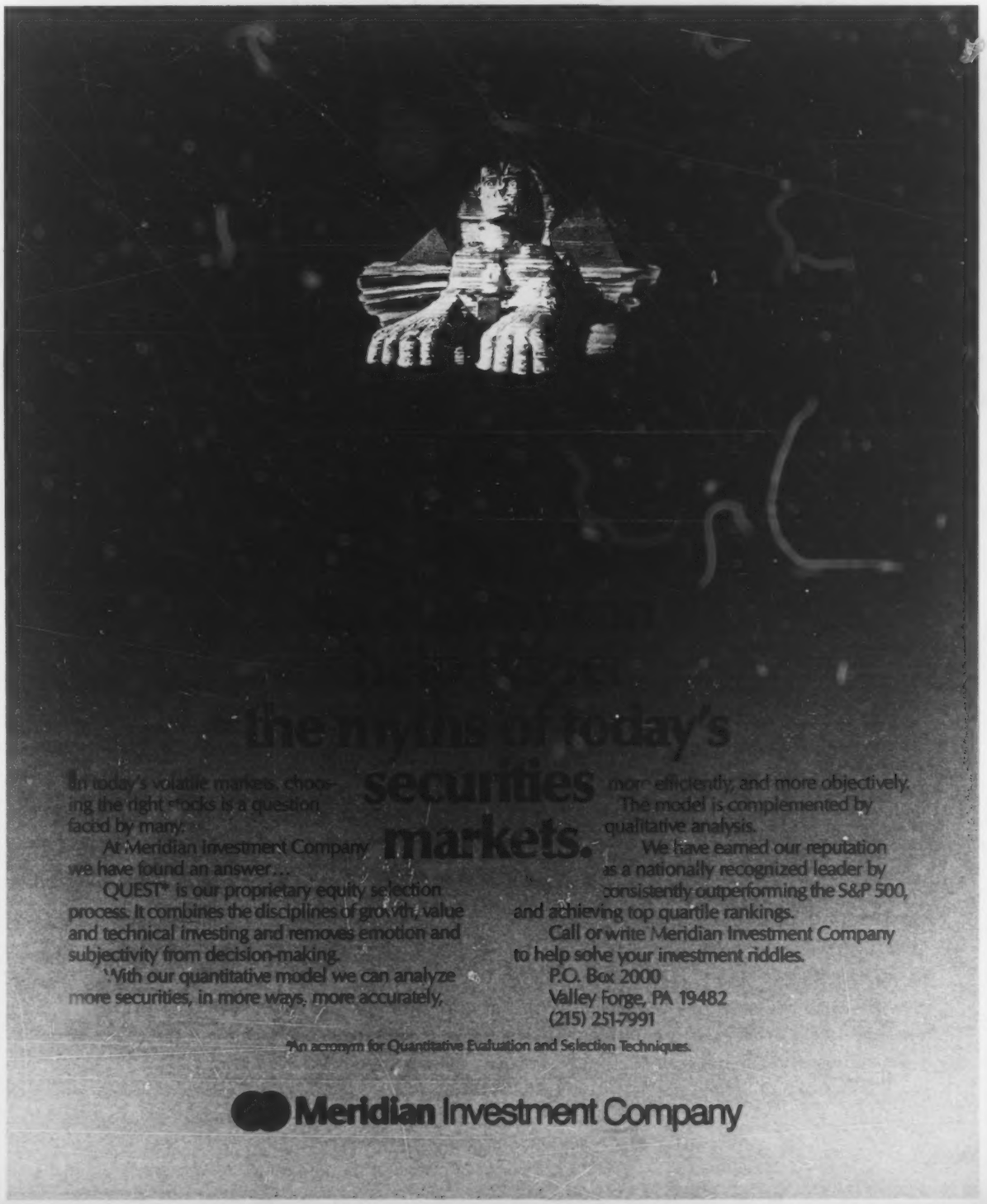

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Fayez Sarofim	15.2
Capstone Asset (Agg. growth)	15.0
Analytic Invst. (Option growth)	15.0
S&P 500	**11.9**

10-year returns

	%
Pacific Century (Sm. cap. gro.)	30.0
Nicholas-Applegate (Emerg. gro.)	24.8
C.H. Brown (Computer dir.)	24.2
Quantitative Asset (Enhan. index)	23.0
Severn Assoc. (I)	22.8
Roxbury Capital	21.7
Fox Asset	21.7
Balch, Hardy & Scheinman	21.4
Ashland Mgmt.	21.2
Roger Engemann	21.1
Capital Growth Mgmt.	20.9
GAMCO Investors (ERISA)	20.8
Tom Johnson Invst.	20.7
Investment Counselors	20.5
Cadence Capital (Lg. cap.)	20.5
Columbus Circle	20.0
Caldwell & Orkin	19.9
Tukman Capital	19.8
Investment Advisers (Sm. cap.)	19.8
Hellman, Jordan	19.7
Neuberger Berman	19.7
Leylegian Invst.	19.6
Wilshire Asset (Sm. co. value)	19.5
Systematic Financial (High cash)	19.4
S&P 500	**15.6**

Top decile PIPER+ special equity funds

3-month returns

	%
Magten Asset (High yield)	16.4
Bradford & Marzec (High yield)	8.6
Waddell & Reed (High yield bond)	8.4
Baring America (High yield)	8.2
Dunnavan & Co. (Act. short sell)	7.6
S&P 500	**-0.2**
Russell 2000	**-1.6**

1-year returns

	%
Equitable Capital (Convert. 34)	31.0
Guild Invst.	30.0
Putnam Cos. (High yield)	19.4
Fidelity Mgmt. (High inc. bond)	16.8
Waddell & Reed (High yield bond)	15.8
S&P 500	**7.4**
Russell 2000	**1.2**

5-year returns

	%
Guild Invst.	37.9
NFJ Invst. (Select)	24.1
Amerindo (Emerg. gro. tech.)	17.9
Equitable Capital (Convert. 34)	14.7
S&P 500	**11.9**
Russell 2000	**3.8**

10-year returns

	%
Guild Invst.	34.7
Amerindo (Emerg. gro. tech.)	25.0
W.H. Reaves (Utility/energy)	19.6
S&P 500	**15.6**

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Russell 2000	**9.9**

Top half PIPER+ global equity funds

3-month returns

	%
AIG Global Investors	3.9
Guild Invst.	1.2
Burgess Capital	0.6
Martin Currie (A)	0.4
Marathon Asset	0.1
Stewart, Ivory (RCB/Stewart)	-0.4
Brinson Partners (World)	-0.4
Trust Co./West	-0.6
G.T. Capital	-0.7
Marvin & Palmer	-0.8
Burgess Capital (Comp.)	-1.0
Ivory & Sime Int'l (3)	-1.3
Putnam Cos.	-1.4
GIM Global	-1.5
Freedom Capital	-1.7
Scudder, Stevens & Clark	-1.8
Lexington Mgmt.	-1.8
Lombard Odier Int'l	-1.9
MSCI World	**-3.2**
FTA World	**-3.3**

1-year returns

	%
Guild Invst	19.8
Trust Co./West	6.2
Brinson Partners (World)	4.1
Martin Currie (A)	0.9
J.P. Morgan Invst.	0.0
Capital Guardian (New pers. F)	-1.2
Marvin & Palmer	-1.5
Stewart, Ivory (RCB/Stewart)	-1.7
Marathon Asset	-3.7
Scudder, Stevens & Clark	-3.8
Putnam Cos.	-3.8
FTA World	**-4.0**
AIG Global Investors	-4.2
MSCI World	**-4.3**
London Bishopsgate (En. index)	-4.5
G.T. Capital	-5.0
Burgess Capital (Comp.)	-5.2
GIM Global	-5.8
WorldInvest	-5.8

5-year returns

	%
Martin Currie (A)	17.8
Burgess Capital	17.6
Brinson Partners (World)	15.4
Stewart, Ivory (RCB/Stewart)	14.3
Marvin & Palmer	13.2
Capital Guardian (New pers. F)	13.0
Ivory & Sime Int'l (3)	12.7
Scudder, Stevens & Clark	12.7
IDS Int'l	11.7
J.P. Morgan Invst.	11.3
WorldInvest	11.2
PanAgora Asset (Tact. country)	11.0
MSCI World	**10.7**
FTA World	**10.7**
Templeton Invst.	10.6

10-year returns

	%
Burgess Capital (Comp.)	21.1
WorldInvest	18.0
Schroder Capital (X)	17.6
Putnam Cos.	17.5
Brinson Partners (World)	17.4
MSCI World	**15.7**
FTA World	**14.0**

Top half PIPER+ international equity funds

3-month returns

	%
Marvin & Palmer (Emerg. mkts.)	10.8
Gulfstream Global	2.2
Marathon Asset	1.3
Dillon, Read Int'l (EAFE)	0.8
Rowe Price-Fleming (Discovery)	0.5
Schroder Capital (Sm. cos.)	-0.3
Nikko Capital (EAFE act.)	-0.3
G.T. Capital (EAFE)	-0.5
Wellington Trust (Emerg.)	-0.7
Martin Currie (B)	-0.9
Putnam Cos.	-1.1
Marvin & Palmer Assoc.	-1.2
Brinson Partners	-1.3
Union Capital	-1.8
UBS Phillips & Drew (EAFE)	-1.8
Baillie Gifford (NCNB Texas)	-1.9
Rowe Price-Fleming	-2.0
Rowe Price-Fleming (Trp.)	-2.0
J.P. Morgan Invst.	-2.3
Kleinwort Benson Int'l	-2.4
Boatmen's Trust (W)	-2.4
Baring Int'l (Acct. 1 EAFE)	-2.5
Fiduciary Trust	-2.5
Murray Johnstone	-2.6
Pictet Int'l (Sm. cap.)	-2.6
J.P. Morgan Invst.	-2.6

PIPER+ global funds

	Periods ended June 30				
	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
First quartile	-0.74	-3.68	12.06	12.72	17.58
Third quartile	-3.68	-7.88	6.68	8.92	15.41
MSCI World	-3.24	-4.31	5.26	10.66	15.71

PIPER+ international funds

	Periods ended June 30				
	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
First quartile	-2.55	-7.71	9.63	14.02	17.21
Third quartile	-4.99	-14.19	3.95	9.31	15.67
MSCI EAFE	-5.38	-11.23	0.25	10.77	17.18

PIPER+ balanced/TAA funds

	Periods ended June 30				
	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
First quartile	1.05	11.34	13.49	11.47	15.76
Third quartile	-0.34	7.39	10.75	9.19	13.91

Lombard Odier (EAFE)	-2.7
The Principal	-2.7
Brown Brothers Harriman	-2.8
Edinburgh Wilmington	-2.8
Capital Guardian	-3.0
Waddell & Reed Asset (Growth)	-3.1
Hill Samuel/IAI	-3.1
Henderson Admin. (EAFE)	-3.3
Wright Investor's	-3.4
GIM Global Advisors	-3.4
Templeton Invst.	-3.5
G.E. Invst.	-3.5
Warburg Invst (A/C 17)	-3.5
RCB Int'l	-3.5
Schroder Capital (EAFE V)	-3.6
Citibank Invst.	-3.7
Capital Guardian (Non-U.S.)	-3.7
AIG Global (EAFE)	-3.7
Batterymarch Financial	-3.7
Matuschka & Co. (EAFE)	-3.8
Scudder, Stevens & Clark (E)	-3.9
MSCI EAFE	**-5.4**
FTA Europe & Pacific	**-5.6**

1-year returns

	%
Marvin & Palmer (Emerg. mkts.)	14.0
Murray Johnstone	2.7
Boatmen's Trust (W)	0.2
Brinson Partners	-0.3
CIGNA Int'l	-1.4
G.T. Capital (EAFE)	-3.9
Martin Currie (B)	-4.1
J.P. Morgan Invst.	-5.5
J.P. Morgan Invst.	-5.5
Provident Capital (Low p/e)	-5.9
Putnam Cos.	-6.3
Wright Investor's	-6.5
Cseh Int'l (Low p/e)	-6.8
Wellington Trust (Emerg.)	-6.9
Baillie Gifford (NCNB Texas)	-6.9
UBS Phillips & Drew (EAFE)	-7.1
Kleinwort Benson	-7.1
Baring Int'l (Acct. 1 EAFE)	-7.2
Rowe Price-Fleming	-7.2
Grantham Mayo v.Otterloo	-7.4
Gulfstream Global	-7.5
Pictet Int'l (Pos. val. uncon.)	-7.5
The Principal	-7.6
Marathon Asset	-7.8
Rowe Price-Fleming (Trp.)	-8.0
Julius Baer Invst. (Emblem)	-8.1
Hill Samuel/IAI	-8.2
Union Capital	-8.2
Nikko Capital (EAFE act.)	-8.2
Citibank Invst.	-8.3
Baring Int'l (Act./passive)	-8.4
AIG Global (EAFE)	-8.5
Lombard Odier (EAFE)	-8.6
Henderson Admin. (EAFE)	-8.9
Schroder Capital (Sm. cos.)	-9.2
Capital Guardian	-9.5
Core (ADR replicator)	-9.6
Ivory & Sime Int'l (5)	-9.7
WorldInvest (IPEF)	-9.9
Capital Guardian (Non-U.S.)	-10.1
Templeton Invst.	-10.2
Scudder, Stevens & Clark (E)	-10.2
Boston Overseas (EAFE)	-10.4
Waddell & Reed Asset (Growth)	-10.4
PCM Int'l	-10.6
Bankers Trust Invst. (EAFE)	-10.7
FTA Europe & Pacific	**-11.0**
MSCI EAFE	**-11.2**

5-year returns

	%
Ivory & Sime Int'l (3)	18.9
Boston Overseas (EAFE)	18.8
Morgan Stanley Asset	18.6
State Street (Cntry. sel. hi val.)	18.3
Templeton Invst.	17.5
CIGNA Int'l	16.8
PCM Int'l	16.3
Grantham Mayo v. Otterloo	15.3
Murray Johnstone	14.8
Provident Capital (Low p/e)	14.8
Rowe Price-Fleming (Trp.)	14.7
Cseh Int'l (Low p/e)	14.6
Brinson Partners	14.5
Batterymarch Financial	14.4
G.T. Capital (EAFE)	14.1
Kleinwort Benson Int'l	13.9
Rowe Price-Fleming	13.6
Globe Finlay (EAFE)	13.5
J.P. Morgan Invst.	13.3
Grantham Mayo v. Otterloo (Act.)	13.3
Scudder, Stevens & Clark (E)	13.3
Martin Currie (Far East)	13.0
Lombard Odier Int'l (EAFE)	12.8
Baring Int'l (Acct. 1 EAFE)	12.7
Martin Currie (B)	12.6
Putnam Cos.	12.5
Capital Guardian (Non-U.S.)	12.5
Baring Int'l (Act./passive)	12.4
Baillie Gifford (NCNB Texas)	12.3
Bankers Trust Invst.	12.1
Wellington Trust (Emerg.)	11.8
FTA Europe & Pacific	**10.9**
MSCI EAFE	**10.8**

10-year returns

	%
Grantham Mayo v. Otterloo (Act.)	21.5
Templeton Invst.	21.3
Baring Int'l (Act./passive)	18.5
Putnam Cos.	18.1
Capital Guardian (Non-U.S.)	17.4
Brinson Partners	17.4
MSCI EAFE	**17.2**
Bankers Trust Invst.	17.2
Baring Int'l (Acct. 1 EAFE)	17.1
Rowe Price-Fleming (Trp.)	17.0
FTA Europe & Pacific	**17.0**
Alliance Capital (Act.)	17.0
G.T. Capital (EAFE)	16.8
Schroder Capital	16.8

Top decile PIPER+ balanced/TAA funds

3-month returns

	%
Trinity Invst.	4.3
Haven Capital	2.9
Robert Willis Assoc.	2.9
Pension Mgmt.	2.4
CL Capital Mgmt.	2.3
McCowan Assoc.	2.2
Capital Mgmt.	2.1
Provident Capital	2.1
Radnor Capital (Act. low p/e)	2.0
Philadelphia Invst.	1.9
Spare Tengler Kaplan & Bischel	1.9
Boatmen's Trust	1.8
Godsey & Gibb Assoc.	1.8
T. Rowe Price Assoc.	1.8
Executive Invst.	1.7
Cumberland Advisors	1.7
Provident Invst.	1.6
Massachusetts Mutual (SIA-M)	1.6
Pierson Capital (II)	1.5
Fidelity Mgmt.	1.5
Bankers Trust (TAA act. mgd.)	1.5
Pine Tree Capital	1.5
Cooke & Bieler	1.5
Smith Affiliated	1.5

1-year returns

	%
Rittmann Capital	24.6
Chancellor (Stockshift 200)	23.2
Mitchell Hutchins (Growth)	19.0
J&W Seligman	18.1
Cheswick Invst.	17.9
Smith Affiliated	16.4
Denver Invst.	16.0
TSA Capital (50 stock/50 bond)	15.7
Robert Willis Assoc.	15.0
Galleon Capital	14.5
Cooke & Bieler	14.4
Brown Capital (Rel. value)	14.2
Chancellor (Stockshift 150)	14.2
Axe/Houghton	14.0
Investment Counselors	14.0
Ashfield & Co.	14.0
Institutional Capital	13.9
Northern Capital (Asset alloc.)	13.8
Independence One Capital	13.7
Kemper Asset	13.7
Munder Capital	13.5

5-year returns

	%
Oxford Capital	19.1
Chancellor (Stockshift 200)	18.0
Investment Counselors	16.0
Seaboard Invst.	16.0
Institutional Capital	15.9
Turner Invst.	15.6
Mitchell Hutchins (Asset alloc.)	15.0
Bankers Trust (TAA-act.)	14.9
Quantilogic Asset (Tact. alloc.)	14.6
Capstone Asset (Growth)	14.2
Essex Invst.	14.0
Dean Invst.	13.8
Fayez Sarofim	13.8
Ashfield & Co.	13.5
Brinson Partners (Global)	13.4
Fox Asset	13.3
Dolan Capital	13.3
Brinson Partners (U.S.)	13.3
Provident Invst.	13.1

10-year returns

	%
Rightime Econ. (Total TA)	20.4
Chancellor (Assetshift 65)	18.6
Penteq Ltd. (Stocks/cash)	18.4
Dean Invst.	18.2
Investment Counselors	18.2
Wells Fargo Invst. (3-way TAA)	18.2
Dolan Capital	18.1
J.P. Morgan Invst. (TAA)	18.0
Mellon Capital (3-way alloc.)	17.9
Institutional Capital	17.8
Caldwell & Orkin	17.8
Tom Johnson Invst.	17.8
Provident Invst.	17.7

PIPER

Continued from page 19

have been less familiar with mortgage funds, and insurance companies have concentrated on mortgages primarily as an investment for their own accounts.

But Mr. Smith said Prudential has started marketing mortgages more aggressively as an investment. With little credit available because of savings and loan and bank problems, pension funds can get aggressive returns from mortgages now, he said.

A mortgage investor can get 160 to 200 basis points over a Treasury security of similar maturity, and about 125 basis points over a BBB bond, he said.

A different kind of fund that has done well in the long and short term is a closed-end apartment fund, John Hancock Financial Services' Special Equity Real Estate Account I fund. SERA I returned 2.3% for the quarter, 8.3% for the year, 7.1% for three years and 8.8% for five years.

The $35 million fund invests in garden apartments in cities such as Indianapolis; Kirkland, Wash.; Phoenix; and Pembroke Pines, Fla.

John Levy, an executive vice president with John Hancock, Boston, said part of the fund's success comes from repositioning its investments geographically using modern portfolio theory techniques.

PIPER tracks the performance of commingled investment funds and is compiled by Rogers, Casey & Associates, Darien, Conn. ■

Lake unveils market-neutral pooled fund

Lake Asset Management Inc. has launched a multimanager pooled fund using a market-neutral strategy, in which some securities are purchased and others sold short.

The fund, Alpha Neutral Fund L.P., began operations in July with assets of $22 million from corporate cash coffers and high-net-worth individuals. Lake would not identify the investors. New York-based Lake also is marketing the fund to pension sponsors, but none have invested thus far.

Managers for the fund are in two categories of investment style. The primary one is a pure market-neutral, long/short strategy, in which managers buy stocks they like and short those they don't, constructing long and short portfolios of roughly equal value. The secondary one is convertible bond hedging and arbitrage, in which managers buy convertible debt, preferred stock or warrants and short the common stock of the same company.

Managers in the pure long/short style are Jacobs Levy Equity Management Inc.; Weiss Global Hedge Fund; Twin Capital Management; Statistical Sciences Inc.; and Zweig/Katzen Investors. Sage Capital Management runs the convertible hedging strategy. ■

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AMI

Continued from page 1
been drawn down so far." He said it is too early to judge the partnership's performance, but added "we're certainly not unhappy."

GKH invested $144.5 million in the company's leveraged buy-out in November of 1989. GM's pension fund invested an additional $75 million in equity in the buy-out through its investment vehicle, First Plaza Group Trust (*Pensions & Investments*, Dec. 12, 1989). Following the offerings and private equity placement, First Plaza will own 14.4% of AMI in addition to the GM pension fund's partnership stake.

AMI is one of several reverse LBOs done this year to take advantage of the strength of the stock market.

The net proceeds of the planned offerings and the private sale of stock, together with $10 million of the company's available cash, will be used to pay down AMI's $469.8 million in variable rate senior subordinated notes due 2000, a loan from MB L.P.

"By doing that we will significantly reduce interest rates, reducing interest payments by $60 million a year. This was an opportunity to delever, reduce interest expenses significantly and strengthen the balance sheet of the company," said Mel Klein, managing general partner of GKH. GKH is managed by Harry Gray, Mel Klein & Partners L.P. in Chicago, an investment partnership organized to make long-term equity and equity-related debt investments.

Mr. Gray is a former chairman and chief executive officer of United Technologies Corp. Mr. Klein formerly was a senior vice president of Donaldson, Lufkin & Jenrette Inc., New York, and a former special counsel to United Technologies. Dan W. Lufkin, a co-founder of DLJ, is a special limited partner of the fund.

Contingent on American Medical International's sale of the senior subordinated notes due 2001, the company will issue subordinated discount debentures due 2005 in exchange for a like amount of its outstanding variable rate senior subordinated discount notes due 2000, held by GM's First Plaza Group Trust.

GKH Private, with its additional private stake of about $40.5 million, will remain the largest holder, with 32.4% of the common stock. Besides the pension funds, the partnership's other investors include the Pritzker family of Chicago, American International Group, the Equitable Life Assurance Society of the United States, First Chicago Corp. and an overseas institution.

MB L.P., with its additional private stake of about $50 million, will own 14.1%.

As of Aug. 13, AMI's stock was trading at 10⅛. The original leveraged buy-out was of 80% of the common shares at 7.

AMI represents GKH Private's second investment. Its first was last May in Hanover Energy, Dallas, a company involved in the transmission of natural gas. It invested $50 million in private equity alongside former Treasury Secretary William Simon and Al Schumaker, the former chairman of First Boston.

GKH still has $300 million to invest in one or two deals and is studying making further energy investments through Hanover.

AMI appointed Robert W. O'Leary its new chairman and chief executive officer July 1, replacing Mr. Gray, who had been acting as an interim chief executive since the buy-out. Mr. O'Leary formerly was chairman of Volunteer Hospitals of America. Mr. Gray remains chairman of the executive committee.

The closing of the public stock offering and the sale of shares in the private placement are conditioned on each other. The closing of the public debt offering is conditioned on the closing of both the public and private stock sales.

About 20% of AMI's common stock will be placed outside the United States.

"The sponsors are putting more money in and asking the public to go in at the same price. It's an unusual opportunity to invest alongside sophisticated professional investors," said Phillip S. Schaeffer, senior vice president of Robert Fleming Inc., New York. His firm owns outstanding AMI senior Eurobonds, which he expects to increase in value as a result of the deals. He expects the new issue of senior subordinated notes to have a coupon of about 13.5%.

Richard Kauffman, head of equity capital markets and a managing director of First Boston, said, "when there was a refinancing of RJR, KKR bought more equity in RJR because they liked RJR and didn't want (their stake) to be diluted. That's an analogous situation to this."

Unlike RJR Nabisco Holdings Capital's $1.5 billion senior notes offering, AMI's upcoming notes issue is viewed by the marketplace as truly high yield, not borderline investment grade.

"Our indications are that there is strong interest (in AMI). The high-yield market has been very strong this year. We've seen a lot of demand for paper, almost a shortage of paper in terms of quality credits that have attractive yields . . . With the equity deal coming out just before the high-yield deal, the feeling is if the equity deal gets done, the high-yield deal will be done successfully," said Michael A. Cherry, an analyst with Merrill Lynch, Pierce, Fenner & Smith Inc., New York. Merrill Lynch & Co. is one of the firms co-managing the deals.

AMI hopes to benefit from a rally in health care stocks.

"Health care has been one of the best performing sectors in the stock market in 1991, and in a year's time AMI as a stock went from as low as over $4 to over $11 when the deal was filed," said Mr. Kauffman.

He noted the performance also reflects the popularity of "stub stocks" this year as the high-yield market has improved. Stub stocks are companies that recapitalized but left an equity piece outstanding in the highly leveraged company. Such stub stocks include AMI, The Kroger Co., RJR Nabisco Inc., Owens-Corning Fiberglas Corp. and FMC Corp., he said.

"Investors use (stub stocks) as high-octane equity because of the double benefits of leverage."

GKH executives felt two critical variables needed to be satisfied before refinancing the buy-out. The company completed a $1 billion divestiture program and received the anticipated proceeds on schedule, and the company's operating performance is on budget.

American Medical Holdings, one of America's leading hospital management companies, had a net loss of $13.7 million, or 27 cents per share, in the 10 months ended Aug. 31, 1990, on net revenue of $2.063 billion. ■

Managers

Continued from page 1
tional money managers offer specialized as well as broad-based international investing services. And, some have racked up impressive performances.

"Over the last, let's say, five years, the international managers who have had superior returns tended to be value-oriented, and value-oriented managers tended to be U.S.-based," said Jim Waterman, senior vice president of InterSec Research Corp., Stamford, Conn. In the international arena, "value methods did very well in terms of stock selection until a couple of years ago."

Some pension executives downplay the location factor. But direct or indirect issues in this area still crop up.

For the $610 million San Jose Police & Fire Department Retirement Plan and the $425 million San Jose Federated City Employees' Retirement System, location was not a key determinant when the funds chose their first international managers this year, said Edward Overton, retirement and benefits administrator for the funds. Primary issues centered on the managers' stability of personnel and their "risk-averse performance," he said.

But three of the four firms hired are U.S. based. The Police & Fire fund hired Baring International Investment Ltd., London, and GIM Global Advisors Inc., Newark, N.J.; the Employees' fund tapped PCM International Inc., Short Hills, N.J., and The Putnam Cos. Inc., Boston. The four firms split a $70 million allocation.

The funds found ample attractions in U.S.-based candidates. "The ones we looked at had had the same people in place for quite awhile, had been (in business) awhile, and were a bit more conversant with foreign markets" than were the foreign-based candidates about the U.S. market, Mr. Overton recalled.

In August 1989, the $4.1 billion Los Angeles Fire & Police Pension System hired four international managers — Oechsle International Advisors, Boston; Globe Finlay Inc., New York; Nomura Capital Management Inc. of Japan and U.K.-based Hill Samuel/Investment Advisers Ltd. (Hill Samuel has been dropped since.)

While the managers' performance hasn't diverged widely, location has somewhat influenced managers' investment choices, observed Thomas Lopez, an investment officer of the fund. Foreign firms tend to have a stronger preference for stocks from their own region than might otherwise be expected, he said. "It's just something to keep in mind" for diversification reasons, Mr. Lopez said.

Many foreign firms wishing to be competitive in the United States have in some ways tightened the communication ties — often by establishing or beefing up a U.S. office. Such trends are expected to mount.

Kleinwort Benson International Investment Ltd., London, the unit of Kleinwort Benson Investment Management Ltd. that targets North America, finds "no evidence to support the thesis" of more pension fund hirings of U.S.-based international money managers, said Richard Watt, assistant director. "That's not apparent to us at all."

According to Mr. Watt, in the past six to nine months, "more people have come through our doors from North America than in probably the last two to three years." The firm's New York office now has a staff of about 10 — about double its size some 18 months ago. One measure of the firm's success: In the past 12 months, it landed about six new separate accounts, most of which are U.S. pension funds, said Mr. Watt, who would not identify the funds.

In the United States, more managers of domestic assets consider foreign investing key to long-term survival. Not only are business growth prospects brighter in the international arena, but also at least some institutional investors deduct from domestic accounts to fund international ones.

To stem the tide and seize opportunities, increasing numbers of domestic managers have been adding international capability — either by starting it from scratch, buying a foreign firm or selling stakes to a foreign institution.

On the latter front, R. Bruce Cameron, a principal at Berkshire Capital Corp. in New York, finds "there are more U.S. firms willing to sell to foreigners than quality foreign partners looking to buy" in the United States.

Although trans-Atlantic buying and selling hasn't been robust this year, the pace should pick up. Foreign organizations expected to purchase a U.S. money manager in the foreseeable future include Swiss Bank Corp., Sumitomo Trust & Banking, Germany's Dresdner Bank and Austria's Creditanstaldt-Bankverein, Mr. Cameron said.

Many U.S. domestic managers have expanded with an international component. According to InterSec Research, the number of U.S.-based international managers with $30 million or more under management actively seeking U.S. pension business grew from 37 out of 57 firms in 1985 to 72 out of 110 firms last year. Of the 72, 54 offered U.S. domestic investment also.

As InterSec's Mr. Waterman observed, "there is a good chunk of U.S. domestic managers who have built international capability and successfully captured assets" of U.S. tax-exempt clients. Firms include Nicholas-Appelgate Capital Management, San Diego; Lehman Ark Management Co. Inc., New York; Hotchkis and Wiley, Los Angeles; and The New England Investment Cos., parent of the new Traycott Partners Ltd., London.

Said Remi Browne, managing director-international investments at Lehman Ark: "Diversifying the business — having another product line — makes sense from a business viewpoint. But in addition, since more and more analysis of U.S. equities includes analysis of foreign competitors of companies, having a more global investment perspective also makes sense."

In the fourth quarter, Lehman Ark plans to start unveiling five international investing products.

A year and a half ago, Hotchkis and Wiley began offering international investing, and it obtained funding from its first client at the end of last year.

With a total of $4 billion under management, $50 million is in international assets, said Sarah Hotchkis, portfolio manager/analyst with Hotchkis and Wiley International, a unit of the main firm. She wouldn't identify the clients, but said two are clients on the domestic side as well. ■

HIRINGS

Continued from page 30
family of six non-overlapping, no-load mutual funds.

The foundation's assets previously were invested in bonds and government securities managed by First Tennessee Bank, Knoxville.

Texas A&M University

COLLEGE STATION, Texas — The Texas A&M University system endowment has hired five investment managers to run its $110 million portfolio.

Kevin McGinnis, financial analyst at Texas A&M, said the system hired Cisneros Asset Management Co., San Antonio, and Eagle Management & Trust, Houston, to manage fixed-income portfolios of $35 million each.

The system also hired Austin & Calvert Inc., San Antonio, to manage a $30 million equity portfolio; and Wise & Norman Inc., Houston, and INVESCO MIM Inc., Atlanta, to manage equity accounts of $5 million each.

Merrill Lynch Consulting Service, Houston, assisted in the search.

Texas Permanent School Fund

AUSTIN, Texas — The Texas Permanent School Fund with $10 billion in tax-exempt assets, has renewed its contract with First City Bank Texas-Houston, as its master trust bank.

Walter Arellano, investment officer, said the contract is renewed every two years.

He said the system conducted an internal search before deciding to retain First City.

Trans-Resources

NEW YORK — Trans-Resources, an industrial holding company, recently hired Bear Stearns Asset Management, New York, to run $15 million in an short-term fixed-income account, according to Ken Traub, assistant to the chairman. Mr. Traub declined to comment further except to say the fund has no plans to hire additional managers at this time.

United Dominion Industries Inc.

CHARLOTTE, N.C. — United Dominion Industries Inc. has overhauled its equity manager lineup as it prepares to spin off portions of its $50 million defined benefit pension plan.

United Dominion, subsidiary of Un, and Schroder Capital Management International, New York, which ran a $4 million international stock account.

About $15 million is sitting in cash, awaiting the spinoffs. The transactions will cause the pension fund to shrink to about $35 million within the next 12 months.

No consultant was used.

United Methodist Church

EVANSTON, Ill. — The $4 billion General Board of Pensions of the United Methodist Church, Evanston, has hired three investment groups in which to place the start of what will be a $50 million housing investment program.

Hired were: Community Investment Corp., Chicago; The Enterprise Foundation, Columbia Md.; and the Neighborhood Housing Service, San Francisco.

The board so far has placed a total of $8.1 million with the three, and will place more and add more firms as the program gets off the ground, according to Jerry Schmahl, portfolio accounting manager. He said the money would be used for a variety of purposes, such as bridge loans and equity stakes.

The investments bring the board's real estate allocation up near the target 15% level, Mr. Schmahl said.

Synthetic

Continued from page 3

general account of an insurance company or bank.

William Rose, director-risk insurance and retirement assets at TRINOVA Corp., Maumee, Ohio, said the company probably will add a separate fund to its $340 million 401(k) plan made up entirely of GIC synthetics as an alternative to its $320 million GIC fund starting early in 1992.

"We will probably offer it as a separate option, managed by an outside manager, and allow employees who don't want to worry about GIC issuer credits to opt into a government securities fund," the GIC synthetic.

Scott Sokol, managing director of Chambers, Dunhill, Rubin & Co., an investment banking firm in Beverly Hills, Calif., said there is a "clear movement" toward synthetic GICs. Chambers has placed more money in synthetics so far this year than in all of 1990.

"The reason plans are switching to synthetics is to enhance the credit of the portfolio," he said.

David Salvin, vice president at Bankers Trust Co., New York, said the move toward synthetics "is more like a tidal wave; it's more than a trend, it's a groundswell. It is taking place because of the concern about insurance company — and bank — credit. People have decided they need industry diversification, high credit quality and safety from market fluctuations."

Mr. Salvin, who developed the bank investment contract program at Bankers Trust, said the BIC market is dormant now. Still, Bankers placed more than $2 billion in synthetic guaranteed investments in the past 14 months.

With the synthetic alternatives, "You are not relying on Bankers Trust credit, you rely on U.S. Treasury credit," he said.

William Finley, vice president at LaSalle National Trust, Chicago, said LaSalle is actively adding synthetics to its $460 million GIC pooled trust. "We want to diversify out of the insurance and banking industries." He said the fund now contains about 30% synthetic GICs, but there is no limit on the use of the vehicles.

Not all plan sponsors favor the use of synthetic GICs. Said Halliburton's Mr. Duffield: "We've been slow to accept GIC alternatives because a lot of them use mirrors to maintain the book value accounting concept."

The company invested in a synthetic GIC product offered by Metropolitan Life Insurance Co., New York.

Several short-term bond managers say nervous plans sponsors who do not want to commit additional assets to the insurance industry now and who do not want to invest in long-term bonds or equities are finding actively managed short- to medium-term bonds a viable temporary option.

Mark Whalen, principal at Trinity Capital Advisors, a short-term manager in Charlotte, N.C., said between 25% and 30% of the nearly $125 million in new business the firm has gained this year has come from GIC funds. "We've started seeing a lot of pension money coming out of GICs."

Christopher E. Cook, marketing representative at Gabelli-O'Connor Fixed Income Management Co., Greenwich, Conn., said about 10% of his firm's $1 billion in assets represents GIC replacements. He said the firm has a short-term product specifically designed for that use.

Most GIC managers and consultants believe the move to synthetics and other options is temporary and that GICs will continue to remain the most popular option in the defined contribution market. They also believe, however, GIC management will evolve into a subset of fixed-income investing.

"We will look back at 1991 as the watershed year, the year that people finally woke up to the fact that GICs weren't immune to the same problems as fixed-income portfolios and that the same investment management techniques need to be applied," said Peter Bowles, president of Fiduciary Capital Management Inc., a Woodbury, Conn., GIC management firm. ■

IRS

Continued from page 3

"It was a planning technique that many employers found attractive and useful, and now it will be gone," Mr. Saveth said.

Restructuring "was a necessary tool that facilitated compliance," said Frank Roque, a consultant with Hewitt Associates, Lincolnshire, Ill. "The vast majority of employers that had trouble passing these tests looked at restructuring," Mr. Roque said.

One consultant estimated 20% of employers used the approach.

Restructuring maximized overall employee contribution rates and increased participation in the plans, according to Advanced Micro Devices' Mr. Schroeder.

"Restructuring clearly was a useful vehicle in maximizing the benefit for all of our employees," he said.

At Advanced Micro Devices, plan participation, which had at one time been in the 20% range, has increased to 65%, following the implementation of restructuring and a matching contribution program, Mr. Schroeder said.

"It had a definite positive impact on some of our employees, and the restructuring actually produced that," he said.

One of the reasons participation went up was the focus on geographic divisions under restructuring. Local managers felt pressure to increase participation so they could increase their own permissible contribution rates.

This would appear to contradict concerns voiced by Treasury Department officials that restructuring discouraged communication of the plans to lower paid workers, which the new rules are intended to promote.

"The real issue is how aggressive were you on restructuring," said John Woyke, principal with TPF&C, Valhalla, N.Y. "There may be some plans out there with real problems . . . I don't think there was a lot of abuse of this," he said.

While the elimination of restructuring is the most important provision of the regulations, there are other key provisions affecting collectively bargained plans and employee withdrawals.

One — requiring employees in collectively bargained plans be tested separately from non-collectively bargained employees — may complicate testing procedures for employers.

Many employers have a general plan that covers all employees, Mr. Roque said.

"For these plans they've significantly increased the administrative burden for determining nondiscrimination," he said. "It's rather bad news."

But unions are likely to be pleased with the provision exempting after-tax contributions from non-discrimination testing. While pre-tax contributions must pass the test to receive tax-favored status, passage is not necessary for the plan to be in compliance.

A change that is likely to please employers and participants is the modification of rules governing hardship withdrawals. Now employees can receive hardship withdrawals that include the amount they would have to pay in penalties and taxes on the distribution. In addition, employees can receive a hardship withdrawal for payment of tuition covering an entire year, as opposed to just the next semester or quarter as was previously allowed. ■

CORRECTIONS & CLARIFICATIONS

Continued from page 4

Three money managers misreported their assets as of Jan. 1, necessitating changes to their profiles published May 20 and resulting in each of them dropping out of the rankings of the fastest growing managers published July 8.

• **Equitable Capital Management Corp.**'s figure for tax-exempt assets reported for Jan. 1, 1987, didn't include general account assets of its parent, Equitable Life Assurance Society of the U.S., while its figure for Jan. 1, 1991, did. Equitable Capital's true figures, including the general account assets, are $23 billion as of Jan. 1, 1987, and $24 billion as of Jan. 1 1991.

• **AmSouth Bank**'s tax-exempt assets, which it reported as $8.177 billion, actually are $2.163 billion.

• **First Interstate Bank of Washington**'s total assets, which it reported as $5.2 billion, actually are $3.4 billion. Its tax-exempt assets, which it reported as $3.4 billion, are $1.2 billion.

As a result, tables accompanying the July 8 article change:

• Of the top 10 fastest growing managers with more than $10 billion in assets: Equitable Capital, which ranked third, drops out. **Copley Real Estate Advisors**, rises to 10th, growing 114.59% to $10.488 billion in 1991 from $4.7 billion in 1987.

• Of those with assets between $5 billion and $10 billion, AmSouth, which ranked seventh, drops out. **Union National Bank** rises to 10th, growing 112.59% to $5.1 billion from $2.399 billion.

• Of those with assets between $1 billion and $5 billion, First Interstate Washington, which ranked third, drops out. **Confederation Life Insurance Co.** rises to 10th, growing 328.82% to $2.509 billion from $524 million.

• Among those with the largest dollar gain overall, Equitable Capital, which ranked fifth, drops out. **Lincoln Capital Management** rises to 10th, showing a $10.488 billion growth rate.

• Of those with the largest percentage gain overall, First Interstate Washington, which ranked ninth, drops out. **Dean Investment Associates** rises to 10th, showing a 494.76% growth rate.

Fund urges full probe of scandal

By Steve Hemmerick

LOS ANGELES — Japan's powerful Ministry of Finance is reported to be impressed with the California Public Employees' Retirement System's call for a comprehensive investigation by the Japanese of that country's security trading practices.

DeWitt Bowman, chief investment officer, sent a letter to Ryutaro Hashimoto, Japan's minister of finance, detailing the $65 billion pension fund's concerns about the Japanese brokerage industry. In his Aug. 5 letter, Mr. Bowman cited his learning about "ties of the Japanese brokerage industry to organized crime and the practice of 'guaranteeing' certain preferred customers from losses." Paybacks to customers are now estimated at $1 billion.

Mr. Bowman called for a "comprehensive investigation to determine the full extent and magnitude of these practices and the implementation of strong regulations to prevent their reoccurrence."

Basil Schwan, assistant chief investment officer, said although there has been no official reply, sources told pension officials the Ministry of Finance is "impressed with our interest." He didn't identify the sources, and Mr. Bowman was unavailable for comment.

Mr. Schwan said the letter to the Ministry of Finance is out of the ordinary, but because of an "absence of regulation and appropriate overview" in the Japanese securities industry, the ministry was "the only party to really communicate with." He said he doesn't think the ministry regarded the letter as brash.

In the letter, Mr. Bowman urged "far more comprehensive steps be taken than the apologies, resignations and pay cuts announced to date." The retirement system has $1 billion invested in more than 450 major Japanese corporations.

Dewitt Bowman is seeking 'far more comprehensive' action in the Japan brokerage scandal.

Other investors in Japanese stocks also are concerned. Charles Stevens, an attorney with Coudert Brothers in Tokyo, reportedly has said some pension and mutual funds are preparing to sue their Japanese brokers. Mr. Stevens, who is in Bali, could not be reached for comment.

One operator of a mutual fund that could be considering some action is Scudder, Stevens & Clark, Boston. Scudder invests in Japan through its New Asia Fund and Japan Fund.

Asked if Scudder is considering a suit, William Blase, a vice president for corporate communications, said, "We have the situation under advisement."

California fund trustees hope to gain insight into Japanese trading practices after meeting with representatives of one of the fund's managers, Nomura Capital Management Inc., New York. Nomura is an affiliate of Nomura Securities, Tokyo, one of four Japanese brokerage houses disciplined by the Ministry of Finance for involvement in the scandal. The meeting was scheduled for Aug. 19. ■

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AT DEADLINE

Realty gets negative return

The Russell-NCREIF Property Index posted its first negative one-year return in its 12-year history, returning −1.1% for the year ended June 30, vs. 0% for the year ended March 31.

Blake Eagle, senior vice president for real estate at Frank Russell, said he hadn't closely studied the most recent data, but noted offices and research and development properties — which comprise about half of the properties in the index — have had serious vacancy problems and falling property values.

Southland names CFO

Frank J. Gangi has been promoted to chief financial officer of Southland Corp. from senior vice president. He will be responsible for the treasurer's, controller's, financial services, corporate planning and other departments.

Finance exec leaves DeSoto

John "Jack" Harness, vice president-finance of DeSoto Inc., has left the company. Mr. Harness is the last of several top executives to leave DeSoto following Sutton Holding's acquisition of 9% of the stock and control of the company's board. His plans have not yet been determined.

William Spier, chief executive officer, will oversee the treasury and investor relations, as well as the $110 million pension fund.

Lazard marketer leaves

Robert Spruill, director of marketing with W R Lazard, resigned effective Aug. 30 to become a majority shareholder with The Randolph Group, an investment sales and marketing firm. Mr. Spruill will own 51% of The Randolph Group.

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INSIDE

MICHAEL A. MARCOTTE

Troubles on the road

Owners of unionized trucking companies claim financing — and even the firms' existence — could be jeopardized unless Congress restricts benefit increases at poorly funded multiemployer pension plans. Page 2.

AP/WIDE WORLD PHOTOS

Tanks in the streets of Moscow symbolized the Soviet coup that later failed.

Investors reassess Russia

Failed coup doesn't overthrow long-term prospects

By Margaret Price

The stunning collapse of communism in the Soviet Union and its political and economic ramifications are firing the imaginations of investors seeing at least long-term opportunities in the now-chaotic area.

But, amid the current crises, near-term investing holds little appeal for many investors.

Some direct investing deals are forging ahead in the U.S.S.R., however, partly on perceptions that political turmoil — and even the very dissolution of what has been the 15-state Soviet Union — won't halt U.S.S.R. business activities.

Thorny questions abound on everything from new national borders to currencies. But for the intrepid — such as Batterymarch Financial Management in Boston, which hopes to make its first investments in the Soviet Union this fall — the current political upheavals could prove helpful.

"The current political crisis is not affecting the economics of the enterprises" targeted for investment, said Dean LeBaron, Batterymarch's chief executive. Mr.

See **U.S.S.R.** *on page 39*

Consultant witnesses history

Dennis Tito, president of Wilshire Associates, was among a group led by Batterymarch Financial Management that became an unwitting witness to history.

Some members of the group — which arrived in the Soviet Union Aug. 18 to explore investing there — climbed onto Soviet tanks the day after their arrival and skirted traffic jams on roads clogged by barricades and tanks.

Mr. Tito didn't join some members of the Batterymarch group — whom he wouldn't name — who participated in the anti-coup demonstrations. He returned to his hotel, but didn't sleep soundly. "My hotel was surrounded by a

See **Tito** *on page 42*

GE caps its retiree health cost

By Hillary Durgin

FAIRFIELD, Conn. — General Electric Co. is capping its contributions to retiree health care at 1994 levels, which benefits consultants say could cut GE's $2.7 billion unfunded liability by 10% to 66%.

GE's maneuver, part of a major new accord with 12 of its unions, likely will soften the potential earnings impact of new accounting practices under the Financial Accounting Standards Board's Statement 106 and help the company curtail escalating health care costs.

Estimates from outside consultants were used because company officials didn't say how the cap would affect GE's liability under FASB 106. Coopers & Lybrand, GE's actuary, was not available for comment.

But Larry Cook, consultant-insurance plans at GE, did say: "The cap does impact the liability longer term."

"I would describe FASB 106 as being the driver behind the negotiations as much as I would an overall attempt on our part to manage health care costs in the future," Mr. Cook said. "The cost cap was specifically focused on and responsive to 106."

The size of any potential reduction in GE's obligation when it adopts the new accounting rule would vary based on such factors as the company's health care cost assumption, demographics and plan design features.

Under FASB 106, companies must accrue the cost of future benefit expenses rather than account for them on a pay-as-you-go basis, beginning in 1993.

By capping its contributions at 1994 levels, GE has, at least for accounting purposes, limited its

See **Retiree** *on page 41*

Convertible deal victim of its own successes

By Marlene Givant Star

The failed coup in the Soviet Union proved an obstacle to Aegon Insurance Group's plan to broaden its U.S. investor base.

In mid-August, the company attempted to place 10% to 20% of bonds issued in a $370 million June Euroconvertible offering with American institutions. But U.S. investors, spooked by the Soviet turmoil, have been shying away from European corporate bonds. And European investors are hesitant to part with the highly rated bonds even though the convertibles are trading at a 27% premium.

"The bond is a victim of its own success in that respect," said Jerker Johansson, vice president of Morgan Stanley International, London, the lead underwriter.

Success posed a problem for Aegon's offering — the largest-ever U.S. dollar convertible offering by a foreign issuer — from the beginning.

A subsidiary of Aegon N.V., The Hague, Netherlands, the company had planned to privately place about $100 million of the $370 million with institutional investors in the United States under the Securities and Exchange Commission's rule 144a.

But European investors and European-based investment arms of U.S. institutions immediately snapped up the entire issue. That's why in mid-August, as soon as it was legally possible under Internal Revenue Service rules, the underwriters attempted to re-sell the publicly traded securities to U.S. investors in private transactions.

Even though the issue is trading at a substantial premium, few European holders wanted to sell the bonds because they are AA rated with attractive terms. And what bonds the underwriters found in the market were richly priced.

Morgan Stanley officials are confident U.S. demand for the bonds will pick up as soon as the dust surrounding the failed Soviet coup settles.

The informal secondary offering would have been a welcome sight in the U.S. market. There is strong demand for convertibles as many are being redeemed or converted, causing the supply in the market to shrink.

Lynch & Mayer Inc., New York, which manages the $100 million Lincoln National Convertible Securities Fund, looked at the securities two weeks ago when they were priced at 106 for a current yield of 6.6%, representing a 30% premium. The firm passed. At presstime, the securities were

See **Aegon** *on page 43*

NEWS DIGEST

RICHARD STERGULZ

The Financial Accounting Standards Board's upcoming draft on fair valuation for accounting of GIC products could turn into a circus for defined contribution plan sponsors. Page 18.

BARRA, the well-regarded consulting firm, plans to go public with a 1.5 million-share offering that could raise as much as $8.5 million. Page 4.

SPECIAL REPORT: DATA BASES AND SOFTWARE

***Pensions & Investments* profiles computer** products created to help plan sponsors. Page 21.

CASH MANAGEMENT

Corporate treasury managers are paying more attention to bank relations, a *P&I* survey shows. Page 34.

FINANCING

Aegon Insurance Group's plan to broaden its U.S. investor base is hindered by the U.S.S.R. turmoil. Page 1.

INTERNATIONAL

American investors see long-term opportunities in the wake of the failed Soviet coup. Page 1.

The scandals in Japan haven't deterred many investors, although Nomura Capital has met with clients to address their concerns. Page 3.

REAL ESTATE

Only the most sophisticated pension funds seem to be taking advantage of rock-bottom property prices. Page 2.

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Few investors bottom-fish

Only big public plans buying despite low realty prices

By Steve Hemmerick

Property prices are hitting bottom in some markets, but only a few of the more sophisticated pension funds are making offers to buy the reduced-price real estate, some money managers say.

One investor in the market is the $11 billion Los Angeles County Employees' Retirement Association, which has up to $100 million to invest with The RREEF Funds, San Francisco, in a separate account.

Keith Geddis, a senior investment officer at the fund, said it is negotiating to buy five warehouses for a total of about $30 million in Southern California. In 1992, the fund will be hiring more separate account managers and will become a major player in real estate investment, he said.

The $65 billion California Public Employees' Retirement System will have invested about $500 million in real estate by the end this year, said Roger Franz, a mortgage investment officer with the fund.

"I think the market must be breaking," said Paul Sack, a RREEF principal. He said it's as "if everybody who wanted to sell property decided this year they would sell."

Today's pension real estate investors are only the "largest" and "most savvy" investors, said Andy Smith, president of Lehndorff & Babson Real Estate Counsel, Dallas. In addition, he said buying today is "client driven," and pension funds won't invest in a property unless the seller meets their criteria exactly.

Pension investors in real estate today are primarily domestic public pension funds and Euro-

See **Realty** *on page 43*

Paul Sack says RREEF has more properties under contract now than ever before.

PosTel sees a ripened Europe

Firm urges caution; big fees cut returns

By Marlene Givant Star

LONDON — PosTel Investment Management Ltd., a pioneer among global private equity investors, is setting its sights on Europe, where it sees alluring opportunities but poorly structured investment vehicles.

PosTel was formed in 1983 from the investment management team of the Post Office Staff Superannuation Fund, when the fund split to become the Post Office and the British Telecommunications staff superannuation schemes. It is wholly owned by both funds and manages $33 billion, representing the bulk of their assets.

The firm has 180 million pounds, about $297 million, worldwide in commitments to venture capital and management buy-out funds; an additional 21 million pounds ($34.65 million) in unquoted companies and more than 60 million pounds ($99 million) in private financial service companies.

PosTel is exercising special caution in choosing European investments, said John Brakell, senior manager. He is one of two full-time professionals devoted to private equity investments from early stage venture capital to buy-outs.

That's because the European banks that offer limited partnerships charge high management fees and do not take into account the time value of money in the structuring of terms and conditions, he said. As a result, returns to an investor may be slashed by more than 50%.

The private equity business on the Continent is very much driven by fees. That is "not a healthy thing. . . . Bank-sponsored funds fees are such that they can destroy investors' returns," Mr. Brakell said.

The structuring of funds is another key consideration.

"We're only making commitments to good managers who accept the long-term implications of the terms and conditions," he said. PosTel believes priority should be to investors before the general partners.

PosTel is not alone in its crusade. An informal group of institutional investor$, pension funds, insurance companies and managers of managers, called the Venture Investors Circle, London, is addressing these concerns.

Although in the United States the top management fee is 2%,

See **PosTel** *on page 41*

Funding flap roils truckers

By Joel Chernoff

WASHINGTON — Unionized trucking firms, hard hit by recession and changing industry economics, are pushing Congress to force multiemployer plans toward fuller funding by limiting poorly funded plans' ability to increase benefits.

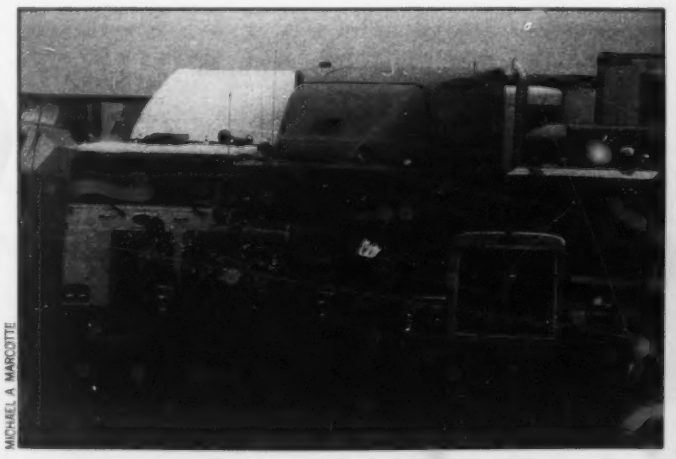
Multiemployer fund officials are crying foul, saying employers are merely trying to create an escape route from their collective bargaining agreements and pension obligations.

The MPPAA Solvency Coalition, a group of 241 employers in the trucking, construction and stevedoring industries, say huge unfunded liabilities of numerous multiemployer plans threaten some of their firms' ability to obtain financing and, ultimately, some companies' very existence.

In addition, they claim the Pension Benefit Guaranty Corp., which backstops these plans in the case of failure, has been complacent in regulating the plans. The group said the PBGC's data are so faulty no one has a clear picture as to how well funded the plans are.

"Underfunding threatens the financial stability of the pension system and the contributing employers who remain in multiemployer pension plans," Richard Damsel, chairman and chief executive officer of Leaseway Transportation Corp., Cleveland, told

See **Truckers** *on page 40*



MICHAEL A. MARCOTTE

Trucking companies and pension officials are polarized by a dispute over the funding of multiemployer plans.

CASH MANAGEMENT

Short-term managers stung by lower interest rates

■ Declining interest rates and a steepening yield curve hurt the returns of short-term investment managers, according to the Yanni-Bilkey CA$H universe.

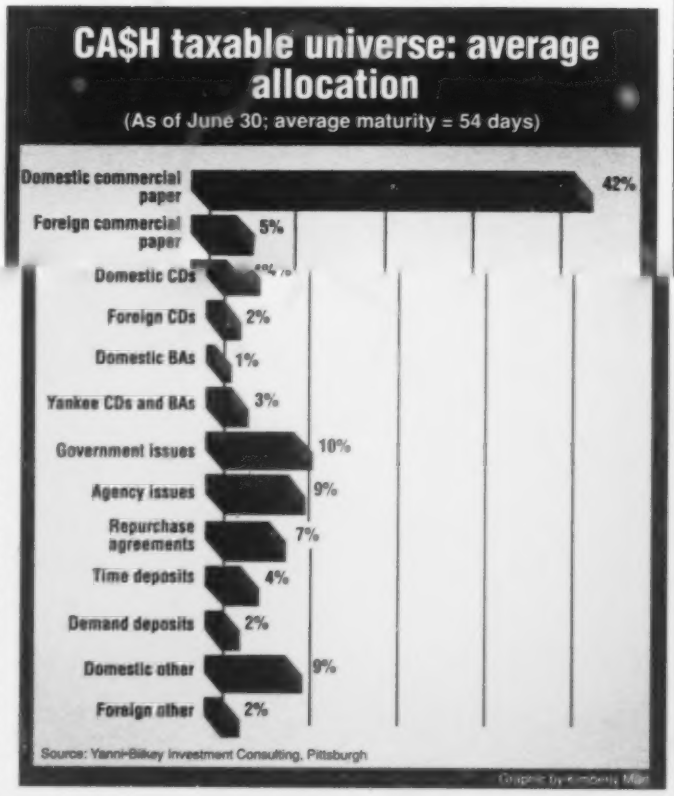
The CA$H universe median short-term manager returned 6.33% for the second quarter, compared with 7.25% during the first quarter. The CA$H return decline mirrored the trend in short-term Treasury bills, which stood at 5.93% at the end of the first quarter and 5.71% at the end of June.

The CA$H universe consists of 240 institutional short-term portfolios managed by 125 asset managers and represents $200 billion in assets. The CA$H universe is compiled by Yanni-Bilkey Investment Consulting, Pittsburgh.

Several factors combined to drive down short-term returns, including a continued Federal Reserve easing and the lowering of the discount rate, according to Bob Beck, director of institutional marketing. In addition, he said, economic news during the quarter offered mixed signals about the direction of the economy.

The average maturity of the CA$H universe increased to 54 days from 45 days at the end of the first quarter as managers moved further out on the yield curve to improve returns.

— Fred Williams



REAL ESTATE

Barclays establishes advisory unit

■ Barclays Business Credit, an experienced senior lender, has established a subsidiary — Barclays Advisory Service — to help other institutions invest in commercial real estate properties.

Barclays Advisory Service will provide lenders with a broad range of services, including analysis of cash flow and asset values, field examinations, appraisals, workouts and real estate portfolio management and space needs analysis.

With the downturn in the economy as a whole and the real estate market in particular, Barclays Business Credit officials sensed there were other lending institutions in need of a fresh, objective approach to their portfolios, said Sandra D. Hanson, senior vice president and manager of the real estate marketing group at the firm.

— Lori Miller

WASHINGTON

Legislation drawing harsh rebuke

■ The Pension Benefit Guaranty Corp. would have to pay pensions to retirees who lost their vested benefits prior to ERISA under a bill passed by the Senate Labor Committee, but the move has drawn the threat of a veto.

On July 17, the Senate Labor panel attached S. 351, the Pension Restoration Act of 1991, to the Older Americans Act, despite Secretary of Labor Lynn Martin's warning she would urge President Bush to veto the legislation. The Older Americans Act may come up for a vote on the Senate floor in September.

In a letter to Sen. Edward Kennedy, D-Mass., chairman of the Senate Labor Committee, Ms. Martin noted the bill would add up to $500 million to the PBGC's deficit, which is around $2 billion.

She also argued the bill employed "budget gimmickry" by forcing the PBGC to pay out benefits from its trust fund investments, and that it would establish a dangerous precedent by covering workers without a financing mechanism.

The bill, colloquially known as the "Pension Losers Bill," has been pushed in Congress for more than a decade. Since the 1974 Employee Retirement Income Security Act was passed, the number of eligible to receive benefits under the bill has declined about 46,000 from 115,000, according to a statement by Sen. Howard Metzenbaum, D-Ohio, who introduced the measure earlier this year.

Under the bill, these retirees would get an annual benefit equal to $75 a year for each year they had participated in a plan.

— Joel Chernoff

Lynn Martin wants the president to veto pension legislation passed by a Senate panel.

FINANCING

DLJ going to pension fund trough

■ Donaldson, Lufkin & Jenrette Securities Corp. plans to raise $1 billion — mainly from state and corporate pension funds — in its first merchant banking limited partnership fund.

As fewer leveraged buy-out firms and investment banks have strong enough track records to raise new merchant banking funds, DLJ is stepping up to the plate, capitalizing on the success of its own $250 million merchant banking portfolio.

That portfolio has racked up annualized returns of more than 100% for the six years ended Dec. 31.

The fund, which will invest in friendly deals in the $200 million to $500 million range, is unusual in that it will not charge a management fee.

Instead, the firm will invest $200 million of its own capital alongside the $1 billion raised from outside investors.

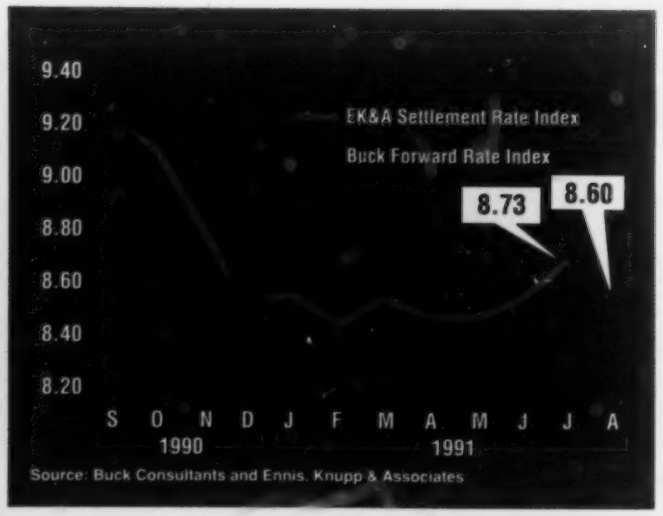
This will be the first time DLJ has gone to the pension fund market.

In addition to being targeted to state and corporate pension funds here and abroad, the fund will be marketed to insurance companies by DLJ officials.

The merchant banking fund will supply both equity and mezzanine financing for buy-outs, recapitalizations and restructurings. The merchant fund will not provide bridge loans; DLJ has a separate $1.25 billion bridge loan fund.

DLJ plans to close the fund in the fall.

— Marlene Givant Star



INVESTING

Bankruptcy pays huge dividends in 1st half of '91

■ Junk bonds performed swimmingly in the first half of 1991 and so did small-cap stocks. But investors could have more than doubled their money during the period through June 27 by buying and holding bankruptcy notes listed on the New York Stock Exchange.

The down-and-out stocks returned 133.6% during the nearly six-month period, according to The Turnaround Letter, a publication of New Generation Research Inc., Boston.

"If you had bought every NYSE-listed bankruptcy stock on Dec. 31 at the published closing price, your portfolio would be up more than 130% through late June," according to the newsletter.

Although the numbers are not adjusted to reflect commissions and bid/ask spreads, they are still extraordinary.

By contrast, a more risk-averse investor could have earned 27.4% by investing in the NASDAQ Composite over the same time period.

Investors also could have earned a 20.4% return investing in junk bonds during the period, as measured by the Merrill Lynch High Yield Bond Average.

For those investors who did enjoy the run-up in bankruptcy stocks, now is the time to take the money and run, the newsletter advised.

"There is little or no ultimate value in most of these stocks and when the speculative fervor that has propelled them subsides, they are likely to come crashing down."

— Marlene Givant Star

DEFINED CONTRIBUTION PLANS

S&P going for new type of quotes

■ Standard & Poor's Corp., known for its oft-quoted stock indexes, is now trying to make a name for itself in the defined contribution business.

The firm isn't hopping on the bandwagon and offering mutual funds, record-keeping or administrative services. Instead, it's serving up "Your Financial Future," a newsletter designed to help 401(k) participants save better for retirement.

"With the shift to the individualistic nature of defined contribution plans comes the responsibility to educate the participants about their investments," said David Blitzer, vice president and chief economist. "So far it hasn't been done."

The newsletter, begun in June, is designed for quarterly publication but can be customized to a corporation's specifications, according to Rob Meyncke, director of new product development. It can be sent hard copy, with or without company logo, included in plan participants' quarterly statements or blipped electronically into computers.

The men said they think the product has a market among the many employers who want to help their employees make informed decisions about investment options with information that doesn't come from the investment companies themselves.

— Curtis Vosti

Standard & Poor's hopes to grab readers with its newsletter.

BENEFITS

Employees pay record amount for health care in '90

■ Employees paid more for health care in 1990 than ever before, a survey of 560 major employers by Hewitt Associates shows.

Rising health care costs have led employers to increase the use of front-end deductibles for hospital charges and to increase the cost of individual deductibles for all services, leaving employees saddled with increased financial responsibilities.

Employers using front-end deductibles increased to 73% in 1990 from 59% in 1985.

Companies with individual deductibles of $200 or more rose to 40% from 18% in 1985. Only 23% of employers in 1990 had a deductible of $100 or less, down from 52% in 1985.

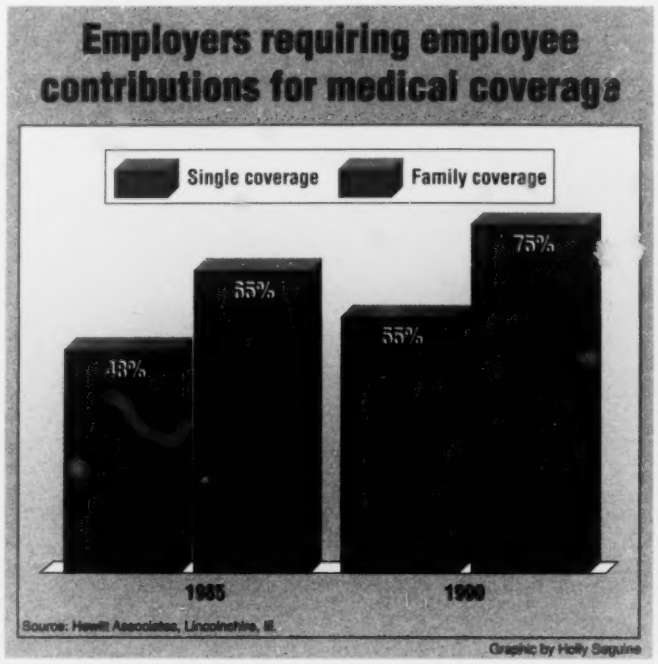
In addition, fewer health care plans (34% in 1990 vs. 51% in 1985) cover total hospital room and board charges and surgical expenses.

Meanwhile, the percentage of plans that cover 80% of room and board costs increased to 51% from 36%.

And only 18% of the plans covered total surgical expenses in 1990, vs. 23% in 1985.

The use of "stop-loss" features (which provide 100% of expenses after a pre-determined maximum of out-of-pocket expenses) increased to 94% from 89% during the past five years. But the outlay expected from employees also increased: 50% of employers held the stop-loss limit at $1,000 or less in 1990 compared to 69% in 1985.

— Lori Miller



INSURERS

Mutual fund has rebalancing option

■ Security Benefit Life Insurance Co., Topeka, Kan., has added a reallocation option to its Variflex Variable Annuity mutual fund product.

Investors allocating assets among the product's seven options now will have their assets automatically reallocated every 90 days to bring investments back in line with target mixes.

The insurer also recently added two options to the product's array of investment choices, which include growth, income growth, high-grade income and money market series.

The Worldwide Equity Series, investing in domestic and foreign equities, was introduced to satisfy investor demands for global market opportunities. It is replacing the High Yield Series, which invested in junk bonds and had little potential for long-term growth.

The Social Awareness Series also has been added for investors who want to respond to the growing social consciousness. Taboo investments include companies involved in producing nuclear energy, manufacturing weapon systems and those that do business in South Africa or are known industrial polluters.

— Lori Miller

PENSION FUNDS

Assets of private plans jump 8.6%

■ The assets of private non-insured pension plans increased 8.6% during the first quarter to $1.443 trillion, the Employee Benefit Research Institute said.

The funds experienced net capital gains of $138 billion in the quarter from favorable stock and bond markets. Dividends and interest added $19 billion. Plan sponsors, however, withdrew $43 billion from the funds in the quarter.

Single-employer defined benefit plans account for 57.6% of private non-insured pension assets; single-employer defined contribution plans, 31.87%; and multiemployer plans, the balance.

Total equity investments for private non-insured plans were 51.2% of assets as of March 31, up from 46.9% at the end of 1990, while total bond investments decreased to 21.1% from 22.2% in the same period. Cash totaled 9%; all other asset classes totaled 18.7%.

— Mike Clowes

REAL ESTATE

Ravitch named to AFL-CIO post

■ Richard Ravitch, the prominent New York City builder and civic leader, has been elected chairman of the AFL-CIO's Housing Investment Trust and named chairman of its Building Investment Trust.

Both trusts invest in union-built construction projects, primarily on behalf of union pension funds. The Housing Investment Trust, with assets of $400 million, invests in home mortgages, while the Building Investment Trust, with assets of $115 million, invests in commercial properties.

Mr. Ravitch is noted for turning around the finances of both the Metropolitan Transit Authority in New York and the New York State Urban Development Corp. He served as chairman for both groups.

Mr. Ravitch also has been responsible for the construction of more than 50,000 union-built multifamily apartments in the United States and Puerto Rico as chairman of HRH Construction Corp., New York.

— Joel Chernoff

Richard Ravitch is the new chairman of the AFL-CIO trusts.

INVESTING

Unions still sticking fast with GICs

■ Guaranteed investment contracts issued by insurance companies remain popular with some, despite the well-publicized financial troubles of a few issuers.

The joint labor/management pooled GIC fund of the International Brotherhood of Electrical Workers and the National Electrical Contractors Association has topped $300 million in less than three years. Begun in August 1988, the first-of-its-kind-industry-specific joint labor/management pooled GIC fund has grown from an initial $70 million.

In addition to the international union, 34 IBEW locals have invested in the fund. And last year, the guidelines were amended to allow any NECA chapter or member company the opportunity to join. Two have signed up so far.

According to Jack Moore, international secretary of the IBEW, the success of the fund has been due to the management of Morley Capital Management Inc., Lake Oswego, Ore., and a concentration on safety through diversification.

The fund uses 20 different issuers, and none is more than 8% of the total fund, according to Morley's Terry Hannon.

"Even if we had one of the troubled issuers — which we don't — the fund wouldn't have been hurt bad because of the diversification."

— Curtis Vosti

WASHINGTON

Senators get bonus with pay boost

■ Along with the 23% pay boost U.S. senators voted for themselves this summer, they will receive a hefty increase in pension benefits, according to the National Taxpayers Union.

The NTU estimates a senator's lifetime congressional pension income will jump to just more than $2 million from $1.7 million before the pay raise. Ten senators could collect immediate retirement benefits of more than $100,000 per year, according to the NTU.

"The 23% pay raise turns into a golden parachute for senators," said David Keating, NTU executive vice president.

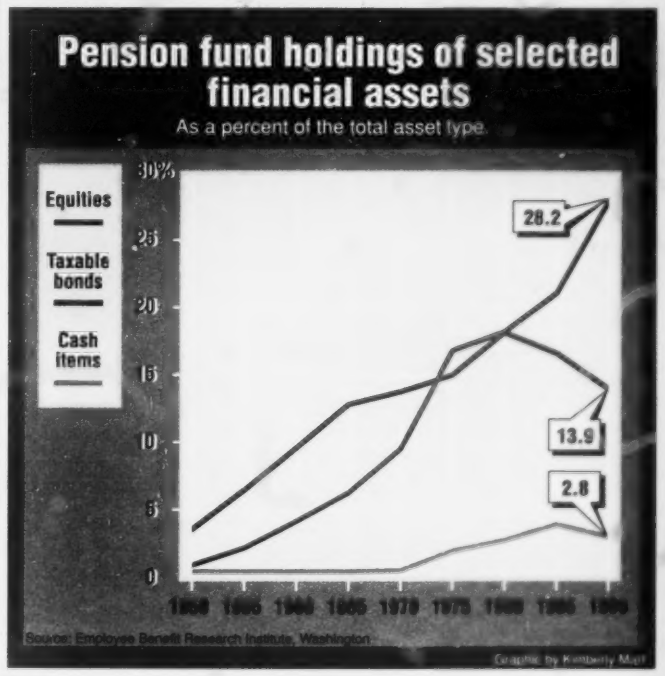
The report noted 72 of the 81 senators included in its study could expect more than $1 million in lifetime benefits, with 36 senators eligible for more than $2 million and 13 eligible for $3 million or more.

According to the report, Sen. Robert Byrd, a West Virginia Democrat and strong advocate of the pay increase, could collect the largest initial annual pension check, $111,795. Sen. Trent Lott, a Republican from Mississippi, tops the list of projected lifetime benefits at $3.9 million, an increase of more than $700,000.

"Many members of Congress could make more in retirement than a typical wage earner could earn in a lifetime," said Mr. Keating.

"Congressional pensions are typically two to three times more generous than those in the private sector and even more generous than pensions for federal workers."

— Fred Williams



INTERNATIONAL

U.K. boardrooms no female haven

■ Fewer than 2% of the total number of directors of U.K. companies in the Financial Times Stock Exchange 100 Index are women, according to research by Pensions Investment Research Consultants Ltd.

As of the end of 1990, only three companies had a woman executive director. Women are somewhat better represented as independent or non-executive directors: 15 hold non-executive directorships on 23 company boards. Two of the women, however, are wives of prominent conservative politicians holding five directorships between them, according to PIRC.

"British company boards are still bastions of male privilege. If companies want to start improving the composition of their boards, they could make a good start by promoting more women. The equal opportunity challenge should be led from the top," said Anne Simpson, finance director of PIRC.

— Marlene Givant Star

PUBLIC FUNDS

Rhode Island treasurer looking to institute changes

■ Rhode Island Treasurer Anthony J. Solomon plans to introduce legislation this fall that would prohibit the governor or the Legislature from offering early retirement to state employees.

An early retirement program offered in 1990 was accepted by about 2,000 of the 19,000 state employees.

An actuary for the $2.6 billion Employee Retirement System of Rhode Island, Providence, estimated the early retirement program will cost taxpayers more than $50 million by the year 2005, according to Mr. Solomon.

The early retirement program saves money in the short term as payrolls decrease, but the savings disappear over time as the retired employees draw pensions, and the salaries of the replacement employees increase, Mr. Solomon said.

Other investment-related provisions of the pension reform legislation include requiring outside audits of the pension fund and prohibiting state agencies from using the retirement system as a bargaining tool in negotiations with state employees.

— Terry Williams

JOHN KENNARD

Rhode Island Treasurer Anthony J. Solomon says early retirement programs will cost the state too much in the future.

INTERNATIONAL

U.K. managers to up U.S. holdings

■ A substantial number of U.K. investment managers consider their portfolios underweighted in U.S. stocks and expect to increase their holdings during the next few months, according to a survey by the Ogilvy Adams & Rinehart Ltd., a public relations firm in London.

The survey queried 61 U.K. investment management firms — including in-house investment professionals of institutions such as pension funds and insurers — that have managers specializing in U.S. equities.

The survey found 56% of managers questioned believe they are underweighted in U.S. stocks, while only 10% consider their U.S. weighting too large. It also found that, on average, U.K. institutional investors have 12% of their assets invested in U.S. equities — one percentage point lower than last year.

The survey did not ask managers either about their ideal U.S. stock exposure or which U.S. stocks they planned to buy.

Among the survey findings: 56% of respondents are likely to raise their U.S. holdings in the next few months, while 21% expect to maintain their current levels; 46% anticipate U.S. equities will outperform their other holdings, while 36% expect them to underperform.

Ogilvy Adams & Rinehart also asked investors about their preferred investment strategies, investing criteria and and sources of information.

Among other information gleaned was that earnings per share information is the most important investment criterion to managers questioned. In second and third place were the quality of management at a company and its cash flow.

— Margaret Price

MONEY MANAGERS

Consolidation has global ring

■ A&A Global Inc., with about $100 million under management, has consolidated with Morse, Williams & Co., a domestic investment management firm.

Both firms are in located New York.

"We will become Morse, Williams' global arm," said Donald B. Gimbel, now managing director and global strategist at Morse, Williams who had been president of A&A Global.

Morse, Williams is a bottom-up, growth stock investor, while A&A is a top-down manager. "When you put them together, they present a well-thought-out philosophy of managing money," Mr. Gimbel said.

The consolidation, which was effective July 1, brings Morse, Williams' assets under management to about $300 million, Mr. Gimbel said.

— Margaret Price

CONFERENCES

Jesse Jackson to lead D.C. panel

■ The Rev. Jesse Jackson heads the list of panelists at the National Investment Managers Association's fourth annual issues forum Sept. 12 in Washington.

Titled, "Minority Participation in America's Pension Funds," the forum will be held at the Washington Hilton. It is part of the 21st annual Congressional Black Caucus Weekend.

The program will examine the diversified role of minorities in investment management and the future of their participation.

Other panelists include Bill Hoyt, retired director of investment strategy with IBM Corp.; Denise L. Nappier, city treasurer of Hartford, Conn.; and Bari E. Lewis, senior financial analyst with Texaco Inc.

For more information about NIMA's issue forum, contact Lesyllee M. White, 1899 L St. N.W., 5th floor, Washington, D.C. 20036.

— Terry Williams

The Rev. Jesse Jackson will discuss the role of minorities in investment management at a September conference.

FINANCING

Brokerage creates new financial unit

■ Ladenburg, Thalmann & Co. Inc., a New York-based brokerage firm, has formed an integrated financial institutions group that will focus on investment banking services, asset/liability advisory assignments, whole loan and mortgage servicing, and trading and merchant banking transactions.

Kenneth L. Rilander will be managing director. He previously was managing director and head of PaineWebber Inc.'s financial institutions investment banking group.

Associate managing directors are Caleb W. Burchenal and Richard S. Foote, previously vice presidents in the investment banking divisions of Goldman, Sachs & Co. and PaineWebber, respectively, and Timothy S. Drayson, formerly a vice president and the senior whole loan trader at PaineWebber.

Named associate directors are C. Brian Egnatz and Terrance E. Loebs, also from PaineWebber, who will work with Mr. Drayson.

— Marlene Givant Star

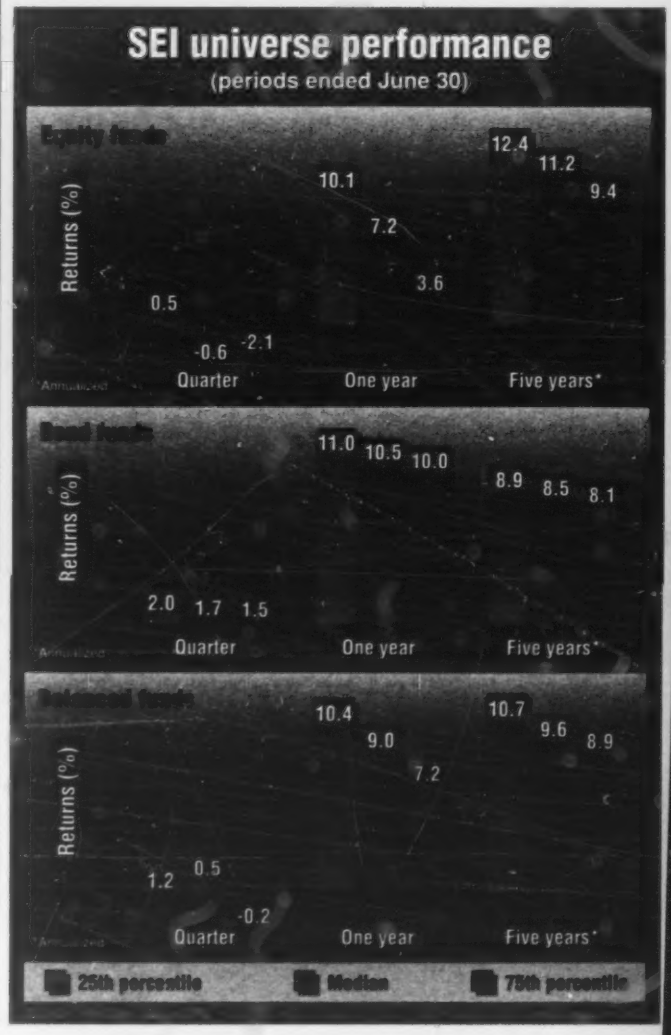
PEOPLE

Pension slot filled at Inland Steel

■ Mike Rippey was named manager of pensions and investments at Inland Steel Industries Inc.'s $1.6 billion pension fund. He previously was assistant manager of financial planning and analysis, and succeeds Lily May, who was named director of corporate accounting.

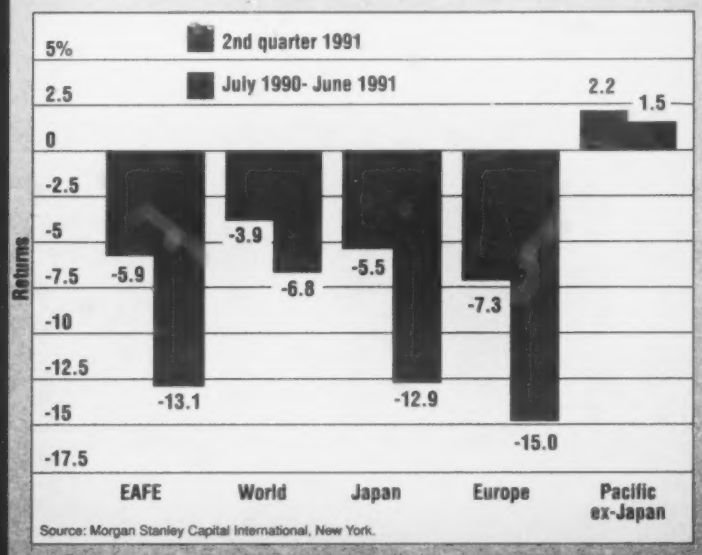
Mr. Rippey will report to Vicki L. Avril, who recently was appointed director of pension investments and administration, following the retirement of Dick Schutter.

— Sabine Schramm



MSCI Worldwide indexes

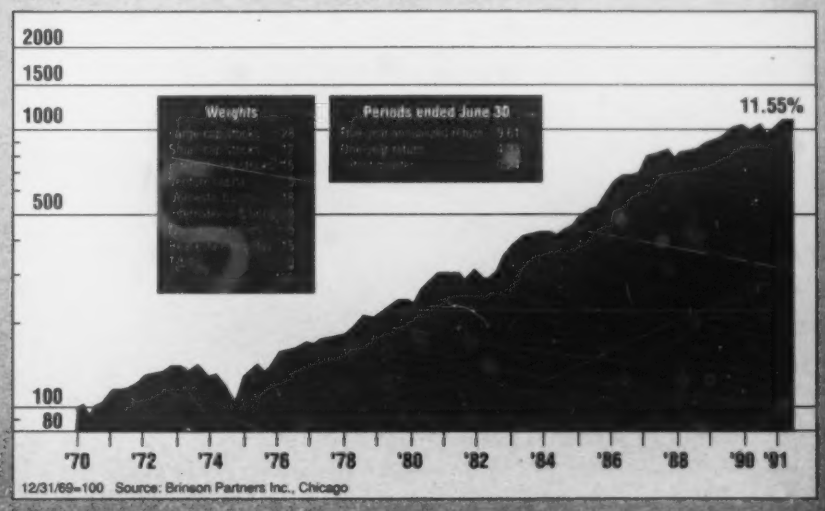
Indexes are in U.S. dollar terms without dividends re-invested



Source: Morgan Stanley Capital International, New York.

Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.



12/31/69=100 Source: Brinson Partners Inc., Chicago

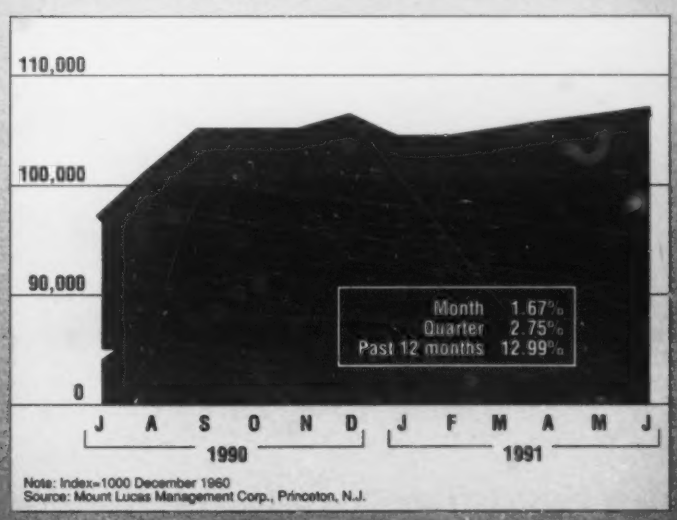
Russell indexes by economic sector

Second quarter 1991 returns

	Russell 3000	Russell 2000	Russell 1000
Consumer discretionary	1.34	2.62	1.22
Financial services	0.89	5.51	0.65
Integrated oils	-2.95	-4.97	-2.94
Other energy	-5.52	-4.18	-5.63
Technology	-4.27	-6.73	-4.06
TOTAL	-0.51	-1.55	-0.45

MLM Index

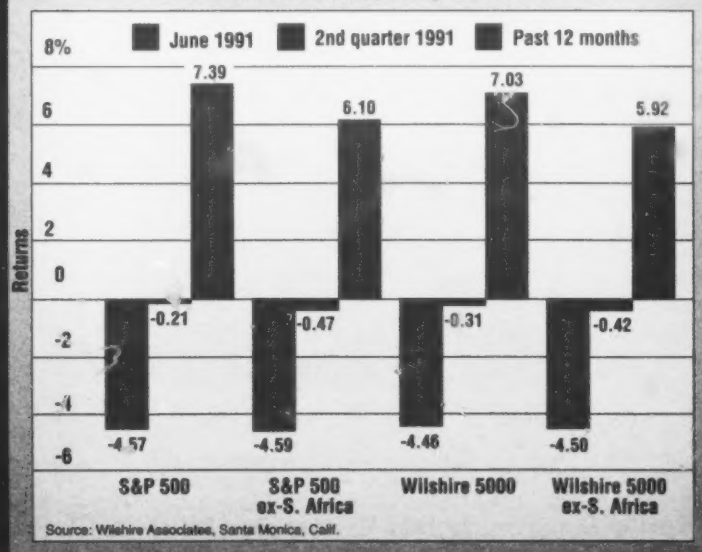
The MLM Index is an unleveraged index used as a benchmark to evaluate commodity futures investments. Periods ended June 30.



Note: Index=1000 December 1980
Source: Mount Lucas Management Corp., Princeton, N.J.

South Africa Free Index

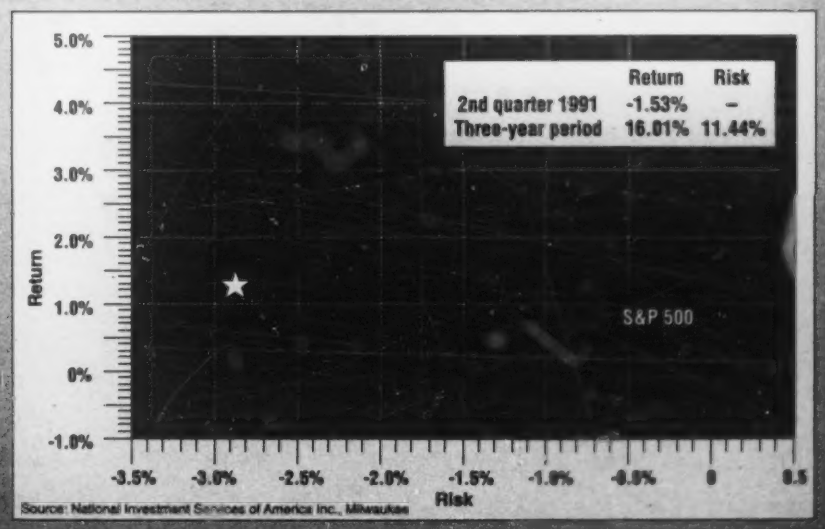
Ex-S. Africa excludes stock of companies with an equity stake in a South Africa business, no replacements.



Source: Wilshire Associates, Santa Monica, Calif.

An Efficient Index

The Efficient Index is an S&P 500 portfolio optimized for the lowest volatility during the previous two-year period, subject to four constraints. The line represents the return and risk figures for the optimized index relative to the S&P 500 during rolling three-year periods.



Source: National Investment Services of America Inc., Milwaukee

GRAPHICS BY CYNTHIA WATSON

New valuation of GICs no longer by the book

By Howard A. Freiman

The Financial Accounting Standards Board, in an exposure draft expected to be issued by year-end, will likely call for "fair value" accounting for guaranteed investment contracts and other similar contracts. For many GICs that will mean market value adjustments. But it won't mean an absolute end to book-value accounting.

The FASB will prepare broad, general guidance on when fair value equals book value. But it will allow practioners and possibly the American Institute of Certified Public Accountants to decide many of the details.

For contracts with benefit-responsive features — that is, the ability of participants to withdraw before maturity at book value — FASB probably will allow practioners to conclude that in many situations, but not all, fair value equals book value.

FASB also will allow practioners to require market-value adjustments for those contracts issued by banks and insurance companies with deteriorating credit strength.

The impending rules could detract from the usefulness of GICs in a sponsor's defined contribution plan. Sponsors should review their contracts' benefit-responsive features and their issuers' financial health. If necessary, renegotiating contracts with banks and insurance companies may be easier now than after FASB acts.

FASB first addressed book-value accounting in 1980 under Financial Accounting Standard No. 35, requiring defined benefit pension plans to present investments — excluding insurance contracts — at fair value. Practitioners extrapolated this treatment for defined contribution plans.

On Aug. 14, the FASB tentatively reaffirmed its decision to require fair market valuation for all contracts, regardless of issuers or terms. But it didn't answer whether fair value could equal book value. To answer this question one needs to distinguish the differing objectives of defined contribution plan accounting from those of defined benefit plans.

In a defined benefit plan, the ability to pay benefits is the primary focus of the financial statement. In a defined contribution plan, the participant is the primary user of the financial statement. Thus, the focus of financial reporting should be the amount the participant can realize from the account. The accounting goal should be to measure the value of a participant's account accurately. To do this, one should use fair value. FASB defines fair value as the amount a plan could expect to receive from a willing buyer.

GICs and bank investment contracts are, in effect, private loans by pension plans to insurance companies and banks. FASB has consistently stated companies should account for private placements at fair value. This requires the value of the private placement to change as interest rates change.

GICs and BICs have a distinguishing characteristic from other private placements. Certain GICs and BICs are benefit responsive, meaning a participant has the right to require the contract issuer to buy back his or her holdings at book value.

Benefit responsiveness represents a valuable put option for participants. The put option need not be separately valued because the combination of the put plus the private loan equals book value.

In a rising interest rate climate, the fixed-income features of a GIC or BIC would fall in value. But a participant's put option offsets the fall and the contract stays at book value. As interest rates fall, the GIC or BIC rise in value. The participant, however, can't realize more than book value. Thus, fair value may be book value.

Because benefit-responsive contracts in defined contribution plans don't always freely allow withdrawals and transfers, FASB will allow practioners to decide whether some features detract from the conclusion that fair value equals book value. Among them:

- A GIC or BIC allows withdrawals only upon certain events, such as retirement, hardship or termination, while subjecting all other withdrawals to a market-value penalty.
- Contracts withdrawals greater than a certain level incur a market-value adjustment or penalty by the issuer. Such massive withdrawals could occur after a sale of a subsidiary or plant shutdown.
- The plan relies on a portfolio of GICs to satisfy benefit responsiveness. Actuaries can argue that cash flow will be sufficient to pay participants. Their case, however, relies on probabilities and accountants don't always believe in probabilities.

Regardless of the ultimate details, FASB's action will forever change the way participants and accountants view and value GICs. ■

Howard A. Freiman is senior vice president, Fidelity Management Trust Co., Boston.

RICHARD STERGULZ

LETTERS TO THE EDITOR

Understanding 'guarantee'

■ Many of us in the insurance, consulting and plan sponsor communities are disturbed by your June 10 column, "Take out the 'guaranteed' in GIC name." We're sensitive to the word "guaranteed" and its implications. To suggest otherwise insults fiduciaries who buy the contracts and insurers who underwrite them.

To institutional investors the "guarantee" has never been separated from the question "by whom." Those who purchased Executive Life GICs often said that they were compensated for the added risk by higher rates or that they purchased only short-term contracts because of the higher risk of the issuer. Few insurance companies or fiduciaries in this highly competitive marketplace agreed with that risk assessment and were quite vocal in the marketplace. Certainly *Pensions & Investments* is in a position to know this. Your reporters have heard several presentations over in recent years on this topic.

The insurance industry has never promoted the GIC as a commodity nor have its members presented the product as guaranteed by any entity other than the company whose name is on the contract.

C. Robert Henrikson
Senior vice president
Pensions national accounts
Metropolitan Life Insurance Co.
New York

Accentuate GICs positives

■ Your June 10 column on the GIC guarantee is, unfortunately, consistent with those that accentuate the negative and ignore the positive. It strikes me that a quality industry magazine should concentrate on how well GICs have served as a funding vehicle for plans over the past 20+ years. This approach, vis-a-vis highlighting the failure of one company, whose activities were not supported by the industry, would be far more beneficial to the buying public.

Fortunately, the purchase of GICs by astute managers continues. It is still a strong, viable and respected funding vehicle that looks to the strength of the company backing it for its "guarantee."

Robert A. Bonner
Vice president-pensions
Sun Financial Group
Wellesley Hills, Mass.

Unfair to insurers

■ I believe you have done a disservice to the pension industry and insurance industry June 10 column on the GIC guarantee.

I realize the failure of Executive Life is and should be a matter of concern to your readers. On the other hand, GICs have now been around for 20 years and have served their constituency well. There is close to $200 billion of them now "guaranteed" by various insurance companies. These are companies that have been in the business for up to 100 years or more and that make "guarantees" all the time without being called into question. Their record is a long and a good one.

Accordingly, I think that to "bash" the product and its purveyors based upon one difficult experience is excessive and can help only in sensationalizing an exceptional and unfortunate situation, and even when that situation has not yet been fully resolved in terms of the ultimate disposition of the guarantees made by that carrier.

Guarantees have always been only as good as the guarantor, but in the insurance industry those guarantees have held up well, and that applies to GICs as well.

Joel C. Cohan
Senior consultant
Marketing consultation group
Life Insurance Marketing and Research Association Inc.
Farmington, Conn.

Really a $2.51 billion firm

■ Please correct our profile in your May 20 directory of investment advisers. The amount of U.S. institutional, tax-exempt assets should read $2.51 billion instead of $3.064 billion. All assets are discretionary.

Nancy Clark
Vice President
Eagle Asset Management Inc.
St. Petersburg, Fla.

'Median manager' is useful

■ Despite a July 22 commentary from Richards & Tierney Inc. critical of their use, median manager returns are appropriate benchmarks, provided they are explained through analysis of components that affect manager performance. Portfolios achieve their returns in drastically different ways. In the case of equities, one has to analyze allocation between stocks and cash, risk, industry weightings, and investment style.

The primary element of manager performance is allocation to stocks and cash. Managers commonly raise or lower cash positions based on market expectations. This allocation is important when comparing an index return to a median return (including equity and cash), because the index is always fully invested, while the median return includes the impact of short-term investments. For example, from our database of 1,300 portfolios we examined five that produced returns close to the median over a 10-year period and found their equity positions ranged from a low of 60% to a high of 100%.

The second key component of manager performance is the amount of risk of a portfolio. Risk should be examined on both a total-portfolio (including equities and cash) and equities-only basis.

Disclosure of the securities within the median manager portfolios isn't necessary for a proper evaluation of manger performance, despite the contention in the commentary. Clients can better determine whether a particular benchmark (median manager or an index) is appropriate for measuring their portfolios' performance by using such median manager style comparisons price-earnings ratios, dividend yield, market capitalization, and market-to-book ratios. These characteristics act as proxies for the underlying securities in the median manager's portfolio, so a client can easily construct a similar portfolio by investing in equities displaying those same characteristics.

Donald H. Korytowski
Vice president-investment analytics
Susan E. Hunter
Manager-research, client communication
SEI Corp.
Chicago

More risk of more runs

"Mutual Benefit's investment woes resemble many others within the (life insurance) industry — and therein lies the problem. This situation will be more difficult for the industry to both explain and distance itself from than the First Executive situation was. . . . (T)he industry and regulators lack a clear plan or meaningful tools to improve waning confidence in the industry. . . . We believe the risk of disintermediation (risk of a run) has accelerated. We do not see a clear method that would restore or offset deteriorated confidence in the industry."

James F. Guenther
Duff & Phelps Inc., Chicago
excerpted from its Credit Decisions

Bank relations top priority

Treasury managers focus hard on industry dilemmas

By Fred Williams

Corporate treasury managers are turning their attention to bank relations and away from broader corporate finance and cash forecasting activities.

Treasury managers almost tripled the amount of time they devote to bank relations, 14% vs. 5% a year ago, *Pensions & Investments*' 1991 Cash Management Survey shows.

Time spent on broader corporate finance and cash forecasting, meanwhile, each decreased 10 percentage points.

Respondents to 1991's survey are concerned about risks associated with bank fiscal soundness, rising FDIC fees (which affect how corporate executives interact with their banks), industry contraction and credit quality concerns.

For example, 80% of respondents say they are paying more attention to bank soundness this year than they did last year.

One major concern is the Federal Reserve Board's proposal to begin charging banks for daylight overdrafts. A daylight overdraft occurs when an institution sends funds over the Fedwire in excess of the balance in its reserve or clearing account or sends more funds over a private wire network than it has received.

Although 60% of the respondents said it is appropriate for banks to pass on daylight overdraft charges to their customers, a whopping 90% said instituting the charges won't eliminate the problem of daylight overdrafts.

But one treasury manager complained "customers should not be penalized for the bank's inability to manage the funds entrusted to it." And another said the charges should be passed on only "if banks (also) give credit for money temporarily invested with the bank in excess balances."

Richard Bort, president of Richard Bort & Associates, a Sherman Oaks, Calif., cash management consultant, said the 25-basis-point charge being proposed by the Fed "is insufficient to induce a change of behavior."

"Most daylight overdraft problems are caused by a handful of banks and are not because what customers are doing but because of what the bank is doing. The charge is an annoyance charge more than anything."

Most companies don't run daylight overdrafts, he said. And if a large corporation needs to move a large sum of money, the company likely would do so even if it is charged a fee, Mr. Bort said.

As a result, he said, a market for hourly loans from other corporations with surplus cash could develop.

Meanwhile, corporations continue to move toward fees to pay bank charges rather than compensating balances.

Respondents are paying 71% of bank charges in cash in 1991, vs. 60% in 1990 and 1989; they said they intend to increase the amount paid through fees to 77% next year.

"All things being equal, it is cheaper for corporations to pay their banks fees for services. If they have excess balances, it is to their advantage to pull the excess and invest it," said Mr. Bort.

Cash and treasury management officials also expressed concern about rising banking costs.

Among the services cited most often as costing more in 1991 than in 1990 were account maintenance, lockbox services, wire transfers and disbursement services. Interestingly, FDIC premium increases were listed more frequently than typical bank services such as credit, item processing, balance reporting and check processing.

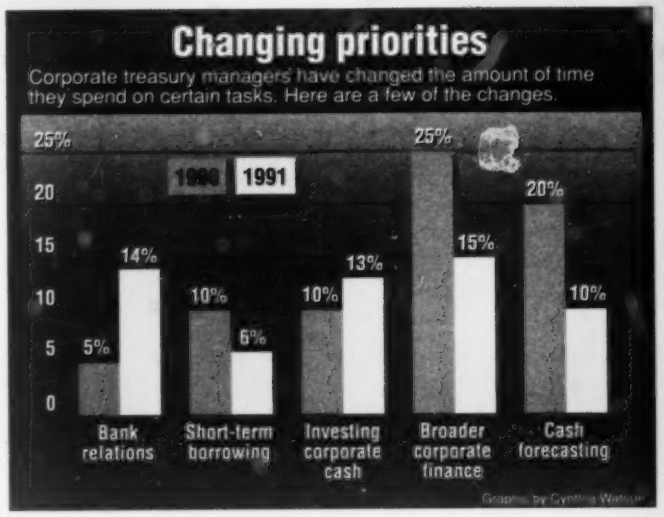
Most respondents said no bank services became more competitively priced during the past 12 months; some cited controlled disbursement services and lockbox services.

Anthony Carfang, president of Treasury Strategies Inc., a Chicago treasury management consulting firm, said FDIC assessments have become "exorbitant."

He said because the assessment has grown so large — to about 23 cents per $1,000 in insured deposits, based on the bank's average ledger balance — banks are passing it all through to their customers.

"It's not a back breaker, but many treasurers feel they are being asked to help pay for the

See **Treasury** *on page 35*



HOW A BILLION DOLLARS IS MAKING A WORLD OF DIFFERENCE.

Church sued over fund investment criteria

By Sabine Schramm

The $1.8 billion Board of Pensions of the Evangelical Lutheran Church of America and the Evangelical Lutheran Church of America are being sued by three ministers alleging the board breached its fiduciary responsibility by using social criteria to determine its investment policies.

In the suit, filed July 23, the Revs. Thomas Basich and Matthew Basich, both of the Advent Lutheran Church, Roseville, Minn., and the Rev. Judith Boal of Beaver, Pa., are asking a Minnesota district court to rule on the prudence of socially directed investments by the Board of Pensions, portability of their individual pension assets and a separation of the management of the church and the church pension fund.

The 403(b)(9) plan offers 12 separate investment funds of four basic types, including the Social Purpose Funds and the South Africa Free Funds, activated July 1 and subject to social screens. (The Alternative Investments Funds and the Predecessor Funds are not subject to social screens. The Predecessor Funds are assets carried over from the 1988 merger of the American Lutheran Church, the Lutheran Church of America and the Association of Evangelical Lutheran Churches and are closed to further investment.)

According to John Harris of Faegre & Benson, Minneapolis, and attorney for the Evangelical Lutheran Church and the Board of Pensions, members of the plan are in the process of electing in which fund they want to be invested.

If they do not choose, their assets default to the South Africa Free Fund.

"The key point is nobody is invested in a screened fund if they don't want to be there," said Mr. Harris. "They can opt for a non-screened fund."

Robert C. Bell, attorney for the Basiches and a partner in Peterson, Bell, Converse & Jensen, Roseville, Minn., said investments are business decisions, but pension fund officials are using social considerations to make business decisions.

According to Mr. Bell, even in the Alternative Investment Funds the pension board can choose a socially oriented investment over another if in all other respects the investment is equal.

He said, however, it is "impossible" for all things to be equal.

Mr. Harris, however, said the Department of Labor recognizes social considerations can play a role where economic considerations are equal.

In both the Alternative and Predecessor funds, the board policy is to go with South Africa-free investments when investment opportunity is equal.

Tim Smith, executive director of the Interfaith Center on Corporate Responsibility, said he believed the board had divested funds prudently on both social and financial grounds. He added social responsibility, part of the mission and purpose of the church, is important to its identity.

The Basiches asked the board in April if they could take their assets out of the pension fund. The board refused because the Basiches did not qualify for lump-sum withdrawal under the provisions of the fund charter.

Part of the suit asks for a "portability plan," which will allow "any beneficiary to withdraw funds credited to the beneficiaries' account, plus interest or other accumulations."

Beneficiaries should have the right to take out their funds and put them in a plan that will give them better returns, according to Mr. Bell.

The policy for divestment in companies with direct or strategic indirect investment in South Africa follows a mandate of the church's Board of the Trustees. According to Mr. Bell, the Board of Pensions, once an independent entity, now is dominated by the church.

The lawsuit filed by the Basiches asks the Minnesota court to direct the church to amend its Articles of Incorporation so the Board of Pensions would be independent and further investments be made "pursuant to the prudent man rule" and not church mandates. ■

Treasury

Continued from page 34

savings and loan bailout," said Mr. Carfang.

Respondents also listed rising FDIC assessments among the most important issues facing cash managers in the next two years.

Other important issues cited are the continued implementation of electronic data interchange and electronic funds transfers in vendor payments; the proposal to charge banks for daylight overdrafts and bank problems such as failures, consolidation, capitalization and safety.

P&I's survey also showed:

- The percentage of treasury managers hedging their borrowings against interest rate volatility increased to 40% from 31% in 1990 and 11% in 1989.
- The average amount of investible cash rose almost 50% — to $143.8 million this year from $97.5 million in 1990. Some 96.3% of respondents say cash is invested by internal staff. Not surprisingly, respondents increased — to 13% from 10% — the amount of time spent on investing corporate cash.
- The number of corporations with written investment objectives and guidelines remained steady at 90%.
- Respondents are becoming more dissatisfied with the performance benchmarks they use to evaluate their cash managers. This year, only 30% said they are very satisfied, down from 34% last year. ■

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We both have strongholds in insurance markets that don't overlap: The Equitable in individual life and annuities in the U.S., and AXA primarily in property and casualty in Europe. And since the U.S. is the world's largest insurance market and the European Community is expected to become the world's largest unified market after 1992, the future looks bright indeed for this new global alliance.

In investment operations, The Equitable and AXA should be an especially powerful force. Together we manage well over $180 billion in assets, which, if combined, would create one of the world's largest institutional investors. And when you add AXA's investment knowledge and distribution capabilities in Europe to The Equitable's in the U.S., you open doors for countless joint investment opportunities all over the world.

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Yet another big plus to this association is the philosophical fit of the two companies. Both consist of people who are committed to excellence, take pride in their professionalism, and are dedicated to building great financial institutions by providing quality service to policyholders and investment clients. These are people who will make the most of new opportunities.

At The Equitable, we're looking forward to a world of opportunities. And a future filled with growth for us, AXA and of course, our clients.

To learn more, please write to Richard H. Jenrette, Chairman and CEO, or Joseph J. Melone, President and COO, at The Equitable, 787 Seventh Avenue, Dept. A, New York, NY 10019.

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GIC/BIC rates down from 2nd quarter peak

By Fred Williams

Rates on guaranteed investment contracts may have peaked during the second quarter as Federal Reserve easing and a flattening yield curve have dropped rates nearly 100 basis points since the end of June.

John Knight, president of Lamberson Knight Inc., a Short Hills, N.J., GIC brokerage, said rates on five-year contracts approached 9% near the end of June but have since fallen off to nearly 8%. Further Fed easing could put additional pressure on GIC rates, already hit hard by credit concerns and problems in the insurance industry.

Peter Bowles, president of Fiduciary Capital Management Inc., Woodbury, Conn., said as the first half of 1991 ended, the GIC/BIC market "could best be described as active and competitive with rates at, or close to, their highest level all year."

BIC rates were most competitive, said Mr. Bowles, for maturities of three years or less. "Until a final ruling is made on whether BICs will continue to receive FDIC coverage and/or if premiums will be charged, BIC rates are likely to continue to be governed by this non-market issue," he said.

Mr. Knight said investor concerns have focused on credit quality; a flight to quality started in 1990 and continued through the second quarter, with many investors limiting their placements to triple-A rated carriers.

He said there has been some "overreaction" to problems in the insurance industry but not by large plans that follow the market. "It's the smaller 401(k) plans who sometimes panic after they hear something has happened to a carrier and then start getting questions from plan participants," he said.

The following insurance company rate quotations on representative five-year, single-deposit, simple-interest, $1 million GICs were provided by Lamberson Knight Inc. and GIC Inc., Beaverton, Ore. The first number is for late June; the second for late March:

- John Alden Life Insurance Co., Miami: 8.9% vs. 8.65%.
- Allstate Life Insurance Cos., Northbrook, Ill.: 8.35% vs. 8.38%.
- Canada Life Assurance Co., Toronto: 8.23% vs. 8.44%.
- CNA Insurance Co., Chicago: 8.24% vs. 8.29%.
- Confederation Life Insurance Co., Atlanta: 8.63% vs. 8.55%.
- Connecticut Mutual Life Insurance Co., Hartford: 8.38% vs. 8.45%.

Crown Life Insurance Co., Toronto: 8.59% vs. 8.3%.

- Hartford Life Insurance Co., Hartford: 8.23% vs. 8.3%.
- John Hancock Mutual Life Insurance Co., Boston: 8.25% vs. 8.3%.
- Life Insurance Co. of Georgia, Atlanta: 8.35% vs. 8.25%.
- Life Insurance Co. of Virginia, Richmond: 8.39% vs. 8.44%.
- Lincoln National Life Insurance Co., Fort Wayne, Ind.: 8.23% vs. 8.13%.
- New York Life Insurance Co., New York: 8.4% vs. 8.4%.
- Northwestern National Life Insurance Co., Minneapolis: 8.44% vs. 8.42%.
- Ohio National Life Insurance Co., Cincinnati: 8.59% vs. 8.54%.

William M. Mercer Asset Planning Inc., Deerfield, Ill., surveys insurance companies for rate quotations and provided the following summary of various bullet GICs for June 1991:

- Three-year, $1 million, compound: high, 8.17%; low, 7.31%; average, 7.77%.
- Three-year, $1 million, simple: high, 8.51%; low, 7.28%; average, 7.91%.
- Five-year, $1 million, compound: high, 8.8%; low, 7.85%; average, 8.27%.
- Five-year, $1 million, simple: high, 9.25%; low, 7.85%; average, 8.41%.
- Seven-year, $1 million, compound: high, 9.09%; low, 8.07%; average, 8.51%.
- Seven-year, $1 million, simple: high, 9.61%; low, 8.07%; average, 8.71%.
- Three-year, $5 million, compound: high, 8.24%; low, 7.34%; average, 7.83%.
- Three-year, $5 million, simple: high, 8.51%; low, 7.31%; average, 7.95%.
- Five-year, $5 million, compound: high, 8.85%; low, 7.95%; average, 8.33%.
- Five-year, $5 million, simple: high, 9.25%; low, 7.95%; average, 8.47%.
- Seven-year, $5 million, compound: high, 9.14%; low, 8.17%; average, 8.58%.
- Seven-year, $5 million, simple: high, 9.61%; low, 8.17%; average, 8.78%.

Mercer also surveys banks for rate quotations on their guaranteed instruments. Rate quotes for one- and three-year bullet BICs for June were:

- One-year, $1 million, compound: high, 6.7%; low, 5.46%; average, 6.19%.
- One-year, $1 million, simple: high, 6.99%; low, 5.46%; average, 6.25%.
- Three-year, $1 million, compound: high, 8.07%; low, 6.95%; average, 7.67%.
- Three-year, $1 million, simple: high, 8.2%; low, 6.96%; average, 7.64%.
- One-year, $5 million, compound: high, 6.7%; low, 5.77%; average, 6.26%.
- One-year, $5 million, simple: high, 7.04%; low, 5.77%; average, 6.34%.
- Three-year, $5 million, compound: high, 8.12%; low, 7.13%; average, 7.72%.
- Three-year, $5 million, simple: high, 8.25%; low, 6.94%; average, 7.69%.

Schmidt Management Co., a GIC market research firm in Tulsa, Okla., has developed a guaranteed product performance measurement index. The Schmidt GIC composite index approximates the return of a continuous, equally weighted investment in one- to 10-year original maturity GICs. (The index shows returns, not rates.)

Total returns for the Schmidt composite for the quarter and year ended June 28 were 2.2% and 9.3%, respectively. The Standard & Poor's 500 Stock Index returned −0.2% and 7.5%; the Merrill Lynch Government/Corporate Bond Master Index, 1.7% and 10.5%; and 90-day Treasury bills, 1.4% and 6.7%. ■

Insurance backlash

Legislators calling for oversight entities

Lawmakers are forging legislation to defend against insurance company insolvency and protect workers and retirees whose savings are invested with insurers.

Rep. John D. Dingell, D-Mich. and Sen. Howard M. Metzenbaum, D-Ohio, are fashioning separate proposals to establish an independent insurance regulatory entity that would set national standards for insurers.

Meanwhile, Reps. William H. Hughs, D-N.J., and Sherwood L. Boehlert, R-N.Y., have introduced a bill designed to protect individual annuity holders.

Rep. Dingell's proposed Federal Insurer Solvency Corp. would develop, implement and enforce national standards for insurance company solvency. The entity would be funded by assessments on insurers.

Implementation of the standards would be handled by individual state insurance departments.

Sen. Metzenbaum's proposal establishes an Insurance Regulatory Commission setting minimum federal standards.

But Sen. Metzenbaum's bill goes a step further by creating a national guarantee fund that would replace the existing state funds.

The Hughs-Boehlert bill, the Retirement Annuity and Protection Act of 1991, H.R. 3210, would safeguard annuitants and address gaps in state insurance protection by: requiring the Pension Benefit Guaranty Corp. to review pension plan terminations and to restrain imprudent annuity contracts; giving state insurance commissioners authority to oversee the purchase of annuities by plan sponsors and ensure state guaranty funds are sufficient; and disclosing to participants the nature of an insurance company's investments and financial condition. ■

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AT DEADLINE

Chrysler lists health liability

Chrysler Corp.'s potential liability for retiree health and medical expenses will be between $4 billion and $6 billion when new accounting rules take effect in January 1993, the company said in a preliminary estimate.

Chrysler is the first of the three major auto companies to disclose its potential liability under FAS 106, which requires companies to accrue liabilities for retiree health and medical benefits.

Ford and General Motors also are expected to have substantial obligations.

Facciani bought by insurer

Insurance brokerage giant Willis Corroon PLC has acquired Facciani & Co., Cleveland, an actuarial and benefits consulting firm that counts TRW and the PBGC among its clients.

The size of the stock-for-stock deal was not revealed.

Mr. Facciani will serve as chief executive officer and president of C&B Consulting Group/Facciani Division, with responsibility for servicing the Great Lakes region. All of Facciani's 50 employees will be retained.

Non-discrimination rules out

The Internal Revenue Service last week released its 610-page final regulations setting non-discrimination rules for pension plans. The long-delayed rules, which are critical to how employers design their plans, implement provisions in the 1986 Tax Reform Act.

Funds hire managers

The $24 billion **Florida State Board of Administration** hired

Continued on page 43

INSIDE

Piping into mutual funds

UGI Corp., an energy company, is keeping a tight lid on its pension fund costs and getting good diversification at the same time by investing half of its defined benefit assets in equity mutual funds. Page 3.

UTC officials said the venture capital program cannot be monitored properly internally.

UTC moves venture cap to manager

By Fred Williams

HARTFORD, Conn. — In an effort to centralize oversight and enhance returns in its venture capital portfolio, the pension fund of United Technologies Corp., Hartford, has made what is believed to be the first fair-value transfer of a large portfolio of venture investments to an outside management firm.

The pension fund will transfer 31 venture partnerships valued at just more than $100 million to HLM Management Co., Boston, which will combine the UTC portfolio into a new partnership. UTC will retain beneficial ownership in the investments, but HLM will direct and oversee them.

Frances M. Hawk, assistant treasurer-pension and benefits management, said the move could be a model for other pension funds whose officials believe venture capital will provide favorable returns over the long term.

The United Technologies transfer is unusual because it is being done at fair market value. Most are done at a deep discount, Ms. Hawk said.

The move also involves an innovative use of an outside manager. Although pension funds have hired outside managers to oversee venture partnerships, the managers' major role has been to select the partnerships, rather than to take an existing portfolio and manage it, said Judith P. Lawrie, HLM general partner.

Ms. Hawk said the UTC transaction was not "liquidity driven" and that the $5.5 billion pension fund remains committed to nontraditional investments.

She said UTC is making the move because the pension fund

See **Venture** *on page 43*

Realty contributions dive

Despite 87% plunge, managers are heavy in cash

By Steve Hemmerick

Pension funds executives slashed the amount of money they gave their real estate managers by 87% in the year ended June 30, compared with a year ago.

Many money managers appear to have stepped out of the market temporarily and now have substantial amounts of cash ready to invest anyway. The 50 largest real estate money managers reported $8.96 billion in tax-exempt assets contributed but not invested as of June 30.

By comparison, they reported $2.29 billion in tax-exempt assets contributed but not invested on June 30, 1990.

From figures obtained in *Pensions & Investments*' annual survey, the 50 largest real estate managers reported only a 2% increase in tax-exempt assets under management for the year ended June 30, 1991, vs. a 14.9% increase for the year ended June 30, 1990. That means the rate of growth actually declined 87%.

The 50 largest managers reported an additional $2.13 billion in tax-exempt assets in real estate for the 12-month period, bringing their total to $123.94 billion. In the previous 12 months, the 50 largest reported an increase of $15.8 billion.

Increases in assets under management can come from increases in valuation as well as new contributions. But managers have been writing down significant numbers of properties since 1987 and investment performance has been weak in the past few years. Therefore, it appears the slight increase came from new or increased contributions.

Real estate investment, once a go-go business, is now only creeping. It is even uncertain whether renewed growth will come in the near term.

Pension funds generally aren't buying real estate as fund executives are dissatisfied with the past advice and current investment performance, consultants say.

And consultants don't see any quick relief.

Not only did the rate of growth slow, but some real estate money managers also reported an actual decline in the amount of assets under management.

Equitable Real Estate Investment Management Inc., New York, the largest real estate money manager for pension funds, reported a $146 million decline in tax-exempt assets under management for the year.

See **Decline** *on page 17*

Media General is taking steps to control its rising retiree medical obligations.

Media General cuts health plan

New employees lose retirement benefit

By Hillary Durgin

RICHMOND, Va. — Media General Inc. is eliminating retiree medical coverage for new employees and will fix its contribution toward those benefits for current employees.

Media General is one of only a few companies to eliminate retiree health coverage immediately and altogether, although many are cutting back on coverage or shifting the cost of such benefits to employees. Those who have eliminated coverage often do it gradually or offer employees an additional way to accumulate retirement savings.

The Richmond-based newspaper and broadcasting company also will offer current employees who retire starting next year a choice of two different levels of retiree medical coverage.

The changes, effective January 1992, target the company's escalating health costs and are intended to limit the company's retiree medical obligations under the Financial Accounting Standards Board's Statement 106.

The company has not reported its obligation for retiree benefits under the new accounting practices dictated by FAS 106.

The retire medical changes, coupled with an early retirement

See **Retiree** *on page 40*

NEWS DIGEST

DOUGLAS KLAUBA

Indexing, commonly regarded as a passive strategy, could be viewed as a way to buy into all of active management — both the good and the bad. In Commentary, page 14.

SPECIAL REPORT: LARGEST REAL ESTATE MANAGERS

Pension fund executives slash the amount of money they give their real estate managers by 87%, according to *P&I*'s latest survey. Page 1.

INTERNATIONAL

Some pension funds raise their target allocation to international investments while others complete funding of targets established earlier. Page 3.

Closed-end single country funds can be an attractive way for pension funds to get a foot into the door of the world's markets. Page 37.

FINANCING

Institutional investors like what they see in the PERCS issue of K mart Corp. Page 3.

The highly leveraged Del Monte Corp. bypasses commercial banks in favor of pension funds and money managers to do a senior financing. Page 4.

REAL ESTATE

Wilshire Associates develops a new index for publicly traded real estate securities. Page 17.

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Consultant survey is in the mail

Questionnaires for *Pensions & Investments*' annual survey of investment management consultants have been mailed. The completed forms, to be used for a special report published Nov. 11, must be returned by Sept. 28. If you have not received a questionnaire, or if you have any questions, please contact Christine Philip at (312) 649-5217.

Security Pacific exodus

3 more from investment staff leave; new firm formed

By Curtis Vosti

LOS ANGELES — Three top officers from Security Pacific Bank's investment operation have left to form their own firm.

The resignations of Bob Sandroni, Carl Goldsmith and William C. Hibschman are the latest in a series of departures of the top echelon of Security Pacific Investment Group in the past six months and have added to the uncertainty arising from the proposed merger between Security Pacific Corp. and BankAmerica Corp.

Earlier this year, Security Pacific Investment Managers Inc., an SPIG subsidiary, lost its chief investment officer, J. Michael Gaffney, and its director of fixed income, Jim Miller. Stephen Walsh, president and chief investment officer for another subsidiary, also left this year.

Each left for what has been described as a better job.

Mr. Sandroni was SPIM's chief equity investment officer; Mr. Goldsmith, the firm's senior equity portfolio manager; and Mr. Hibschman, director of institutional client relations for the investment group.

Their resignations — shortly after Labor Day and within a month of the announcement of the proposed bank merger — have left some clients and firm officials scrambling. SPIM officials were hastily contacting clients to let them know of the changes.

Bank officials issued a brief statement saying Harvey Spiro, SPIM vice chairman, had assumed Mr. Sandroni's duties in equity investments.

"Because SPIM has a strong reputation in the industry, we are aware that our employees have valuable experience that may be attractive to other institutions," the statement said. "However, we have sufficient depth in personnel and experience to assure the continued smooth operation of our equity investment management unit."

The bevy of changes left clients concerned about how it would all shake out.

"One of the things we look at is material personnel changes," said Dennis Sugino, chief investment officer of the $4 billion Los Angeles Fire & Police Pension System.

"It's an important part of value-added services," he added.

The system's board was set to meet Sept. 12 to discuss the matter with its staff. SPIM manages $470 million in equities and $560 million in fixed income for the fund.

"It's so brand new we haven't had time to figure it out yet," said Paul Boland, treasurer of the $1.1 billion San Diego County Employees' Retirement System. SPIM manages $200 million in

See **Exodus** *on page 43*

Market neutral funds gain fans

$1.6 billion flows to equity strategy

By Terry Williams

Market neutral investing is, literally, an investment strategy whose time has come.

In the 1970s, no one understood it, said Amy Jo Gottfurcht, a principal with market neutral strategist Statistical Sciences Inc., Beverly Hills, Calif.

In the 1980s, no one was interested, because although its practitioners posted strong and consistent returns, it nevertheless underperformed the bull market.

But in the 1990s, as understanding of the strategy has increased and investors realize the 1980s were an investment anomaly, assets are beginning to flow into market neutral strategies.

Seven managers offering market neutral strategies run more than $1.6 billion in those accounts for clients including Unisys Corp., Virginia Retirement System, Amoco Corp. and Consolidated Natural Gas Co.

A consultant, who asked he not be identified, estimates that since the beginning of 1991, pension funds have put $500 million into market neutral strategies. Although it isn't a large amount, it is significant, given the relatively few managers that perform this style of management.

The $4.5 billion pension fund for Unisys, Blue Bell, Pa., has invested an unspecified amount with three market neutral managers: Twin Capital Management, Pittsburgh; Rosenberg Institutional Equity Management, Orinda, Calif.; and Jacobs Levy Equity Management Inc., Roseland, N.J.

The $1.6 billion Consolidated Natural Gas pension fund has committed $25 million in Jacobs Levy's market neutral strategy, but might increase the allocation

See **Neutral** *on page 43*

Ken Levy, left, and Bruce Jacobs of Jacobs Levy Equity Management use more than 50 variables to rank stocks.

Public funds mull protection

By Joel Chernoff

Public pension fund officials are thinking of asking Congress to protect their plans from cash-hungry governors and legislators.

With many states and municipalities looking to public funds to help them balance their budgets, some public fund officials think "maybe we need a Bigger Brother in here," said Harold Schaitberger. Mr. Schaitberger is legislative counsel to the National Conference on Public Employee Retirement Systems and an official at the International Association of Firefighters, Washington.

The attitude marks a radical change from the past decade, when public fund officials had argued they had improved their funding and investment practices without federal legislation.

California Gov. Pete Wilson's $1.6 billion raid on the California Public Employees' Retirement System this summer to help close the state's budget deficit has struck fear into the hearts of many public fund officials. At least 18 states have turned to their pension funds for short-term answers in the past two years.

"Pension funds are the only solvent institution left in America," said Carlos Resendez, chairman of NCPERS and executive director of the San Antonio (Texas) Firemen's and Policemen's Pension Fund.

In response, the conference last week filed a friend-of-the-court

See **Public** *on page 42*

New realty index created

Publicly traded securities comprise Wilshire offering

By Steve Hemmerick

Wilshire Associates, believing the way pension funds invest in real estate is flawed, has developed a new index for publicly traded real estate securities.

Publicly traded real estate securities will be the "next vehicle" for pension fund investment in real estate, as popular as commingled funds once were, said Michael Torres, a senior associate and consultant for real estate with Wilshire Associates, Santa Monica, Calif.

Publicly traded real estate securities will provide the liquidity through market repricing that pension funds don't have in their real estate portfolios, he said.

Most tax-exempt fund realty investments are through private, not public, trades. Pension and other tax-exempt funds have about $64 billion in shares of privately traded commingled funds.

The Wilshire index, composed of 65 securities, has a market capitalization of only $8.2 billion, too small for any but small pension funds to invest substantial amounts of money in without driving up the securities' prices.

But larger pension funds can use publicly traded securities for tactical changes in their real estate portfolios until the market grows larger. For example, by investing a small amount in particular real estate securities, such as a real estate investment trust that invests in East Coast retail properties, a large pension could change its portfolio's geographical and property type weighting.

Investment in real estate securities will have to evolve, Mr. Torres said.

Some pension funds already make such investments. Indeed, Wilshire constructed its real estate securities index at the request of a pension fund client he wouldn't identify that was investing in the securities and wanted a benchmark.

As the market grows, pension funds most likely would hire investment managers to select publicly traded real estate securities.

The largest single investment in publicly traded real estate securities is believed to be the $65 billion California Public Employees Retirement Systems' $400 million investment in Catellus Corp., San Francisco, a real estate development company.

Some, like the $35 billion California State Teachers' Retirement System, have investments in real estate companies through indexed stock investments. Those investments are viewed as stock investments. Mr. Torres said, however, a Wilshire study shows that stock investments in publicly traded real estate companies and trusts have the characteristics of real estate and are not simply stock investments.

A key reason pension funds didn't invest much money in publicly traded real estate securities

See **Wilshire** *on page 36*

Decline

Continued from page 1

The decline is particularly noticeable because Equitable's tax-exempt assets under management increased more than $1.3 billion in the previous year.

Other managers reporting a decline in tax-exempt assets under management this year included: Aetna Life Insurance Co./Aetna Realty Investors, Hartford, Conn., down $602 million; RREEF, San Francisco, down $624 million; and Alex. Brown Kleinwort Benson Realty Advisors Corp., Baltimore, down $546 million.

The second largest real estate manager, JMB Institutional Realty Corp., Chicago, reported $1.36 billion less in assets under management this year. But this year's figure didn't include assets from JMB's Acquisition Partners or its Randsworth Trust PLC.

JMB executives have said Randsworth, an $800 million investment in London's West End, has suffered some loss in property value, and JMB's floating rate-debt financing of Randsworth has suffered from higher interest rates in Great Britain. But executives would give no details about Randsworth or other investments.

JMB wasn't the only real estate money manager shy about revealing details in the troubled real estate market. Thirty smaller managers included in last year's directory provided no data to *P&I* this year.

Michael Torres, a senior associate and real estate consultant with Wilshire Associates, Santa Monica, Calif., said money is only trickling into most real estate managers because of doubts about investment performance in the current market.

He said there is "a credibility problem with managers. There is a lack of confidence between the plan sponsor and the investment manager about the realities of the real estate market." Many pension fund executives also are worried about the economic recession, and "flaws" in the design of some real estate investment vehicles, he said.

But Bruce Ludwig, a director with TCW Realty Advisors, Los Angeles, thinks pension fund executives also are being affected by conditions close to home that they read in "negative press" about real estate. Some have "lost money on their own house" while reading horror stories about real estate in the Northeast, he noted.

William J. Lyons, a vice president with the $4.9 billion New York-based Corporate Property Investors real estate investment trust, agreed: "Reading about what is going on in real estate is scaring some (pension) funds away."

But Steve Steppe, a principal with RREEF, said pension executives whose funds have a lot of money in poor-performing office properties probably are disappointed, but the ones who don't, he suspects, are not unhappy with real estate.

Still another reason for the lack of growth in assets is that existing real estate investments held by pension funds have had flat or negative valuations, said Mr. Torres. For the 12 months ended June 30, the Russell-NCREIF Property Index reported a return of −1.1%, the first negative one-year return in the 12-year history of the index.

That there is little growth in real estate assets held by pension funds is "not surprising" and "probably appropriate," said Mr. Ludwig. He said real estate developers are being sent a message by pension funds that their excesses in building won't be tolerated any longer.

But before real estate returns improve, pension executives probably should expect more bad performance.

Because of falling rents, the 1992 real estate numbers are going to "shell shock everybody" because real estate appraisals lag current losses in property values by one year, said Mr. Ludwig.

"I see easily four more quarters of decline," said Mr. Torres.

Another problem is what investment structure to use, said Mr. Steppe. Not much money is being raised in commingled funds because investors have had trouble getting their money out of those funds, he noted.

Pension executives have found flaws in open- and closed-end commingled funds, and "the jury is still out" on separate accounts, said Mr. Torres.

Paul Saint-Pierre, president of the San Francisco-based consulting firm Pension Realty Advisors, said one or two open-end funds are disappearing each year. Unlike finite closed-end funds, open-end funds are supposed to exist perpetually.

Massachusetts Mutual Life Insurance Co. and NCNB began liquidating one open-end fund each this year, Mr. Saint-Pierre said, and First Wachovia, The Travelers Corp. and Metropolitan Life Insurance Co. each had an open-end fund begin liquidation in 1990.

Problems also exist for closed-end fund operators. Sixty-one closed-end funds in the first quarter and 63 in the second quarter of 1991 were seeking contributions from pension executives, said Mr. Saint-Pierre. The number is not far below the high of 68 that sought contributions in the second quarter of 1990.

But closed-end fund operators today are seeking between $8 billion and $12.5 billion in contributions by themselves, when pension funds are only putting between $4 billion and $6 billion in all real estate vehicles each year.

"There are going to be a lot of disappointed funds out there that are not going to be attracting money. The capital flow is very low," said Mr. Saint-Pierre.

Still, commingled fund managers offering a unique strategy still can draw significant contributions from pension executives, he said.

One firm that has done so is GE Investments, Stamford Conn., an investment management subsidiary of General Electric Co. GE Investments reported a $1.32 billion increase in tax-exempt assets under management, the largest increase of any manager.

Geoffrey R. Norman, an executive vice president, said the addition contributions were invested in closed-end commingled funds, but he believes part of the increase came, but was not reported in time, last year.

A key reason for the investment is that GE's pension trust put money in GE Investments' funds.

Mr. Norman said pension fund executives feel more comfortable investing with managers who have their own money in an investment. That way, he said, they know the firm "wouldn't hustle money in just to get the fee meter running."

Other real estate money managers reporting increases in tax-exempt investments under management tin the 12 months included: Heitman Advisory Corp., Chicago, $370 million; The Yarmouth Group Inc., New York, $410 million; The O'Connor Group, New York, $211 million; and Lehndorff & Babson Real Estate Counsel, Dallas, $105 million.

Although many managers are having trouble getting contributions this year, it might be one of the best times to invest in real estate.

"We are moderately bullish on the market right now, given that this is best time (to invest) in term of pricing," said Mr. Saint-Pierre. He said there have been "significant" pricing corrections on properties, but he advises caution in manager selection.

As of June 30, the 50 largest managers of tax-exempt assets reported $101.17 billion in real estate equity money, $14.86 billion in hybrid debt and $7.91 billion in mortgage money.

The average tax-exempt property mix among the 50 largest managers was 2% in hotels, 16.6% in industrial, 10.8% in multifamily, 36.8% in offices, 24% in retail and 9.8% in other properties.

There has been a sharp reduction in the amount of assets in offices, which made up 41.8% of the Top 50's tax-exempt assets the previous year. How much of the reduction has come from selling properties or reductions in value isn't clear.

For tax-exempt assets, the geographic mix of properties for the largest managers is 35% in the West, 26.5% in the East, 17.8% in the Midwest and 20.7% in the South.

Of the properties held for tax-exempt investors by the Top 50, 89% are in existing properties and 11% in developmental.

The total amount in tax-exempt and taxable assets for the largest managers this year was $304.79 billion, compared to $301.89 billion the previous year. ■

How data were collected

Data for the real estate investment managers directory were gathered from questionnaires.

More than 300 managers were sent questionnaires and asked about such topics as tax-exempt and total assets under management; breakdowns among equity real estate, hybrid debt and mortgage investments; and the geographic and property mix of the tax-exempt assets.

Firms also were asked to provide a brief description of any open-end commingled funds and closed-end funds still open for subscription.

The tables that appear in the directory are based on the responses from the 75 participating firms, which are listed on page 19. The top 50 firms ranked by tax-exempt assets in property investments, and one manager of managers, are profiled beginning on page 20.

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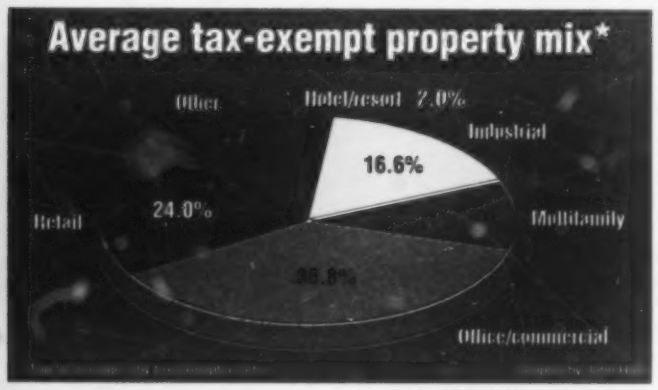

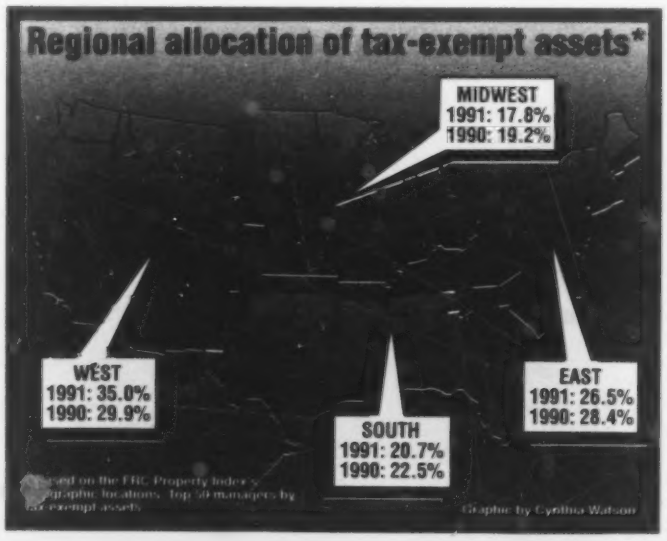

Real estate investment advisers ranked by tax-exempt assets*

	Tax-exempt assets ($ mils)					Taxable/tax-exempt assets ($ mils)			
	Total	Equity	Hybrid debt	Mortgages	Fully discretionary	Total	Equity	Hybrid debt	Mortgages
2. JMB Institutional	9,981	9,770	211		9,185	20,172	9,875	211	10,086
4. Heitman Advisory	6,870	6,870				6,870	6,870		
6. LaSalle Advisors	5,120	5,120			3,000	5,120	5,120		
8. Yarmouth Group	4,700	4,500	200		3,350	7,900	7,250	650	
10. Aldrich, Eastman & Waltch	4,450	1,080	2,765	605	2,060	4,635	1,205	2,820	610
12. RREEF	3,421	3,372		49	2,483	4,287	4,225		62
14. Corporate Property Investors	2,800	2,744		56	2,800	5,000	4,900		100
16. Jones Lang Wootton	2,300	2,000	300		750	3,300	2,500	800	
18. McMorgan	2,030	350	80	1,600	2,030	2,030	350	80	1,600
20. L.J. Melody	1,941	137	763	1,041		2,600	137	763	1,700
22. CIGNA Investments	1,820	1,670	146	4	1,246	15,579	2,644	1,335	11,600
24. Sentinel Real Estate	1,785	1,713		72	1,263	2,286	2,186		100
26. Koll Realty	1,665	1,663	2		1,665	3,963	3,848	115	
28. MIG Realty	1,342	758	333	251	594	1,342	758	333	251
30. John Hancock Financial	1,133	1,128		5	1,133	13,947	3,264		10,683
32. Kennedy Associates	1,024	790	221	13	199	1,024	790	221	13
34. Mellon/McMahan	953	712	135	106	666	1,103	812	171	120
36. CB Commercial Realty	860	823	33	4	698	860	823	33	4
38. PSI Institutional	728	728				3,247	2,947		300
40. Schroder Real Estate	700	700			450	1,500	1,500		
42. Metric Institutional	662	639	10	13	639	2,328	2,305	10	13
44. Prentiss Properties	602	602			500	679	679		
46. Dreyfus Realty	523	487	36		227	523	487	36	
48. AFL-CIO Housing & Bldg.	463			463	463	463			463
50. State Street Bank (m)	430	249	181		430	520	301	219	
52. Frank Russell Trust (m)	376	376				376	376		
54. Resource Investments	291	291			291	291	291		
56. Coventry Investment	252	252				280	280		
58. RCB Trust (m)	240	164	45	31	240	240	164	45	31
60. Grubb & Ellis Realty	211	185	21	5	102	679	653	21	5
62. Hart Advisors	183	115	24	44		183	115	24	44
64. Loeb Partners Realty	150	150				750	750		
66. Principal Mutual	106	106			106	11,097	397		10,700
68. Lieberman	100	80		20	100	100	80		20
70. C&S/Sovran Trust	98	46		52	65	950	819		131
72. Rosen Associates	50	50			50	560	560		
74. First Interstate Bank	14	14				14	14		
Total	127,282	103,755	15,284	8,243	89,281	327,862	175,800	21,299	130,763

*assets as of June 30, 1991 ** as of Dec. 31, 1990 (m) - manager of managers; assets not included in totals.

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(212) 836-9667

Aetna Life Insurance Co./Aetna Realty Investors

151 Farmington Ave., Hartford, Conn. 06156; (203) 273-0123

	($ millions)
Tax-exempt real estate assets	$4,464
Equity	$3,213
Hybrid debt	$973
Mortgages	$278
Commingled or pooled funds	
Equity	$2,473
Hybrid debt	$973
Mortgages	$2
Direct, separate accounts	
Equity	$740
Mortgages	$276
Total real estate assets	$28,717
Equity	$5,168
Hybrid debt	$973
Mortgages	$22,576

As of June 30, Aetna Life Insurance Co./Aetna Realty Investors had $4.464 billion in U.S. institutional tax-exempt real estate assets, of which $3.536 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $2.962 billion as of June 30. Contributions received but not invested were $91 million; contributions committed but not received were $160 million.

Of the total assets under management, $161 million was invested for non-U.S. clients.

Of the U.S. tax-exempt assets, 97% was in existing and 3% in developmental properties. The property mix was 3% hotel/resort; 21% industrial; 22% multifamily; 34% office/commercial; 19% retail; and 1% land. The geographic mix was 41% West; 12% Midwest; 29% East; and 18% South.

The firm offers open- and closed-end commingled funds, including closed-end specialty accounts, open-end participating mortgage accounts, single property and individual separate accounts.

The Real Estate Separate Account (RESA), an open-end fund, has contributions received and invested of $1.542 billion and contributions received but not invested of $52 million. RESA is an actively managed core portfolio of equity real estate, focusing on existing, well-leased properties or properties with expansion/rehabilitation potential. Forward commitments on to-be-built properties are made on a very limited basis. Investments have been structures as wholly owned properties or as partnership ventures. Investments are generally purchased with cash. Current acquisition strategy focuses on apartments, industrial and retail properties.

The Participating Mortgage Separate Account (PMSA) has contributions received and invested of $829 million and contributions received, but not invested of $45 million. PMSA is an aggressively managed core portfolio of participating mortgages and equity real estate. Investments consist of mortgage interests, land underlying commercial, income-producing property, and acquired properties that were mortgage investments. Current emphasis is on industrial and retail investments in targeted markets.

The Union Separate Account (USA) has contributions received and invested of $99 million and contributions received, but not invested of $18 million. USA is an aggressively managed core portfolio of participating mortgages and equity real estate. USA invests only in union-built properties. Investments consist of mortgage interests, land underlying commercial, income-producing property, and acquired properties that were mortgage investments. Current emphasis is on industrial and retail investments in targeted markets.

Union Residential Mortgage Account (URMA) has contributions received and invested of $840,000, contributions received but not invested of $1.2 million and contributions committed but not received of $8 million. URMA is an open-end pooled account that invests directly in residential first mortgages on new, owner-occupied, single-family residences constructed by union tradesmen. URMA will seek to invest in targeted geographic areas, focusing on communities with strong and diverse economies where residential construction is performed with union labor.

The parent company is Aetna Life and Casualty Co.

Rodney C. Dimock is in charge of making property investments; John E. Arant III is client contact.

AFL-CIO Housing & Building Investment Trusts

1717 K St. N.W., Suite 707, Washington, D.C. 20006; (202) 331-8055

	($ millions)
Tax-exempt real estate assets	$463
Mortgages	$463
Commingled or pooled funds	
Mortgages	$463
Total real estate assets	$463

As of June 30, the AFL-CIO Housing & Building Investment Trusts had $463 million in U.S. institutional tax-exempt real estate assets, all of which was in fully discretionary accounts.

Of the U.S. tax-exempt assets, 74% was in existing and 26% in developmental properties. The property mix was 94% multifamily and 6% single-family housing. The geographic mix was 28% West; 53% Midwest; 16% East; 3% South.

The firm offers two open-end real estate funds.

The AFL-CIO Housing Investment Trust (HIT), an open-end fund, has $339 million in contributions received and invested, $74 million in contributions received but not invested and $50 million in contributions committed but not received for 263 participants. The HIT fund invests in construction loans, mortgages, mortgage-backed securities and participating mortgages in fully diversified portfolios for 100% union-built residential real estate projects.

In addition to the assets listed above, $121 million is managed on its behalf by Riggs National Bank in the AFL-CIO Building Investment Trust (BIT), an open-end fund. The fund has $53 million in contributions received and invested; $63 million in contributions received, but not invested; and $5 million in contributions committed, but not received for 29 participants. The BIT fund invests in construction loans, mortgages, mortgage-backed securities and participating mortgages in fully diversified commercial/office and retail properties.

Tax-exempt clients include the California Public Employees', Bricklayers & Trowel Trades International, International Union of Operating Engineers and the Bakery and Confectionary Union and Industry.

William Tutt is in charge of making property investments; Michael Arnold is client contact.

Aldrich, Eastman & Waltch

225 Franklin St., Boston, Mass. 02110; (617) 261-9000

	($ millions)
Tax-exempt real estate assets	$4,450
Equity	$1,080
Hybrid debt	$2,765
Mortgages	$605
Commingled or pooled funds	
Equity	$285
Hybrid debt	$805
Direct, separate accounts	
Equity	$795
Hybrid debt	$1,960
Mortgages	$805

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NCNB

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The State of Texas

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Houston, TX 77056

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totalling over 540,000 square feet in
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Taylor, Michigan and
Southgate, Michigan

Cushman & Wakefield, Inc.
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Southfield, MI 48034

CUSHMAN & WAKEFIELD
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is pleased to announce
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First Interstate Bank of California

in the sale of
Victoria Woods
a 328 unit apartment complex in
Rancho Cucamonga, California
to
Allmark, Inc. of Rancho Cucamonga

Cushman & Wakefield, Inc.
515 South Flower Street
Los Angeles, CA 90071

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Westwood Corporation

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Portland, Oregon
to
Summa Equity Corporation

Cushman & Wakefield, Inc.
200 SW Market Street
Portland, OR 97201

CUSHMAN & WAKEFIELD
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RREEF USA Fund-III, Inc.

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Atlanta, GA 30309

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Pitney Bowes Real Estate
Financing Corporation
a wholly-owned subsidiary of
Pitney Bowes Credit Corporation

in the acquisition of
Gateway Building
a 305,000 square foot industrial facility in
St. Petersburg, Florida
with a leveraged lease to
Honeywell, Inc.
and the placement of First Mortgage Financing
with
Prudential Capital Corp.

Cushman & Wakefield, Inc.
9 West Broad Street
Stamford, CT 06902

Total real estate assets	$4,635
Equity	$1,205
Hybrid debt	$2,820
Mortgages	$610

As of June 30, Aldrich, Eastman & Waltch L.P. had $4.45 billion in U.S. institutional tax-exempt real estate assets, of which $2.06 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.08 billion as of June 30.

Of the U.S. tax-exempt assets, 30% was in existing and 10% in developments' properties. The property mix was 2% hotel/resort; 11% industrial; 7% multifamily; 35% office/commercial; 36% retail; and 9% mixed-use portfolios. The geographic mix was 30% West; 19% Midwest; 39% East; 12% South.

The firm has invested in S&L/thrift properties.

The firm offers closed-end commingled funds and separate account management.

The six AEW-State Street Real Estate Funds are closed for new contributions.

Tax-exempt clients include GM, AT&T, Connecticut and Iowa.

Secured Capital is a subsidiary of the firm.

Joseph F. Azrack is in charge of making property investments; Susan Hudson-Wilson is the client contact.

ASB Capital Management

655 15th St. N.W., Suite 800, Washington, D.C. 20005; (202) 383-6300

	($ millions)
Tax-exempt real estate assets	$595
Equity	$439
Hybrid debt	$156
Commingled or pooled funds	
Equity	$66
Hybrid debt	$12
Direct, separate accounts	
Equity	$373
Hybrid debt	$144
Total real estate assets	$595

As of June 30, ASB Capital Management Inc. had $595 million in U.S. institutional tax-exempt real estate assets, of which $58 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $306 million as of June 30. Contributions received but not invested were $49 million; contributions committed but not received were $84 million.

All of the U.S. tax-exempt assets were in developmental properties. The property mix was 1.7% hotel/resort; 7.9% industrial; 15.4% multifamily; 74.7% office/commercial; and 0.3% land. The geographic mix was 27.9% West; 21% Midwest; 40.7% East; 10.4% South.

The firm offers an open-end commingled fund and separate account management.

The Employee Benefit Real Estate Fund is an open-end fund with $28 million in contributions received and invested and $49 million in contributions received, but not invested. The fund investments in developmental joint ventures.

Tax-exempt clients include the IBEW, the National Electrical Contractors Association, the Electrical Workers Benefit Association and the Plumbers and Pipefitters.

The parent company is MNC Financial Inc.

Paul R. Lowman is in charge of making property investments; Ian W. Jones is client contact.

The Balcor Co.

4849 Golf Road, Skokie, Ill. 60077; (708) 676-6949

	($ millions)
Tax-exempt real estate assets	$1,810
Equity	$682
Hybrid debt	$1,128
Commingled or pooled funds	
Equity	$682
Hybrid debt	$1,102
Direct, separate accounts	
Hybrid debt	$26
Total real estate assets	$4,635
Equity	$3,507
Hybrid debt	$1,128

As of June 30, The Balcor Co. had $1.81 billion in U.S. institutional tax-exempt real estate assets, none of which was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $682 million as of June 30.

Of the total assets under management, $45 million was invested for non-U.S. clients, including $26 million for Japanese clients.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 1.6% hotel/resort; 5.4% industrial; 34.9% multifamily housing; 39.8% office/commercial; 12.5% retail; and 5.8% mobile home parks. The geographic mix was 25.1% West; 26.7% Midwest; 15.2% East; 33% South.

The parent company is American Express.

Thomas E. Meador is in charge of making property investments; John K. Powell Jr. is client contact.

The Boston Co. Real Estate Counsel Inc.

1 Boston Place, OB18B, Boston, Mass. 02108; (617) 722-7000

	($ millions)
Tax-exempt real estate assets	$2,784
Equity	$933
Hybrid debt	$1,851
Commingled or pooled funds	
Hybrid debt	$130
Direct, separate accounts	
Equity	$933
Hybrid debt	$1,721
Total real estate assets	$2,784

As of June 30, The Boston Co. Real Estate Counsel Inc. had $2.784 billion in U.S. institutional tax-exempt real estate assets, of which $1.212 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $933 million as of June 30.

Of the U.S. tax-exempt assets, 91% was in existing and 9% in developmental properties. The property mix was 16% hotel; 7% multifamily; 57% office/commercial; 18% retail; and 2% other. The geographic mix was 30% West; 15% Midwest; 45% East; 10% South.

The firm offers separate accounts; none of its closed-end funds is open to new subscriptions.

Tax-exempt clients include AT&T, GM, United Technologies and Texas Teachers.

The parent company is The Boston Co.

Mark A. Albertson is in charge of making property investments; Melissa Browne is client contact.

Alex. Brown Kleinwort Benson Realty Advisors

2 N. Charles St., Baltimore, Md. 21201; (303) 783-3200

	($ millions)
Tax-exempt real estate assets	$3,176
Equity	$1,551
Hybrid debt	$1,004
Mortgages	$621
Commingled or pooled funds	
Equity	$64
Mortgages	$7
Direct, separate accounts	
Equity	$1,487
Hybrid debt	$1,004
Mortgages	$614
Total real estate assets	$3,176

As of June 30, Alex. Brown Kleinwort Benson Realty Advisors Corp. had $3.176 billion in U.S. institutional tax-exempt real estate assets, of which $155 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.551 billion as of June 30.

Of the U.S. tax-exempt assets, $34 million was invested in Canada, the U.K., France, Spain, Australia and Japan.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 9.5% hotel/resort; 14.5% industrial; 7.3% multifamily; 50.6% office/commercial; 17.3% retail; and 0.8% land. The geographic mix was 36.4% West; 13.3% Midwest; 23% East; 27.3% South.

The firm offers separate accounts; no closed-end funds are open for subscription.

Tax-exempt clients include California PERS, Illinois Teachers, Oregon PERS and Utah.

The parent company is Alex. Brown/Kleinwort Benson.

John Guinee is in charge of making property investments; Winston Hickox is client contact.

Master trust directory: Oct. 14.

Cabot Partners L.P.

60 State St., Boston, Mass. 02109; (617) 723-0900

	($ millions)
Tax-exempt real estate assets	$810
Equity	$810
Direct, separate accounts	
Equity	$810
Total real estate assets	$900
Equity	$900

As of June 30, Cabot Partners L.P., formerly Cabot, Cabot & Forbes Realty Advisors Inc., had $810 million in U.S. institutional tax-exempt real estate assets, all of which was fully discretionary.

The tax-exempt equity assets had a market value of $370 million as of June 30. Contributions received but not invested were $10 million; contributions committed but not received were $430 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 87% industrial and 13% office/commercial. The geographic mix was 23% West; 21% Midwest; 51% East; 5% South.

The firm offers separate accounts and co-investment programs.

Tax-exempt clients include Ameritech, BellSouth, Eastman Kodak, IBM and Shell Oil.

Robert E. Patterson is in charge of making property investments; Robert M. Angland is client contact.

CB Commercial Realty Advisors

533 Fremont Ave., Los Angeles, Calif. 90071; (213) 613-3705

	($ millions)
Tax-exempt real estate assets	$860
Equity	$823
Hybrid debt	$33
Mortgages	$4
Commingled or pooled funds	
Equity	$362
Hybrid debt	$33
Mortgages	$4
Direct, separate accounts	
Equity	$461
Total real estate assets	$860

As of June 30, CB Commercial Realty Advisors, formerly Coldwell Banker Commercial Realty Advisors, had $860 million in U.S. institutional tax-exempt real estate assets, of which $696 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $796 million as of June 30. Contributions committed but not received were $25 million.

Of the U.S. tax-exempt assets, 89.6% was in ex-

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Top 10 equity real estate managers*

Equitable Real Estate	10,871
Copley Real Estate	9,225
Prudential Real Estate	5,240
Yarmouth Group	4,500
TCW Realty	3,658
Total	63,002

lating and 10.4% in developmental properties. The property mix was 30% industrial; 49.3% office/commercial; 20.4% retail; and 0.3% land. The geographic mix was 52.9% West; 8.4% Midwest; 29.5% East; 9.2% South.

The firm offers separate accounts; no closed-end funds are open to new subscriptions.

Tax-exempt clients include AT&T, Unisys, Kodak and Stanley Works.

The parent company is CB Commercial Real Estate Group Inc.

Cab Grayson is in charge of making property investments; Al Beaudette is client contact.

CIGNA Investments Inc.

Hartford, Conn. 06152; (203) 726-7316

Tax-exempt real estate assets	$1,820
Equity	$1,670
Hybrid debt	$146
Mortgages	$4
Commingled or pooled funds	
Equity	$1,494
Hybrid debt	$37
Mortgages	$4
Direct, separate accounts	
Equity	$176
Hybrid debt	$109
Total real estate assets	$15,579
Equity	$2,644
Hybrid debt	$1,335
Mortgages	$11,600

As of June 30, CIGNA Investments Inc. had $1.82 billion in U.S. institutional tax-exempt real estate assets, of which $1.246 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.623 billion as of June 30. Contributions committed but not received were $47 million.

Of the U.S. tax-exempt assets, 99% was in existing and 1% in developmental properties. The property mix was 6% hotel/resort; 22% industrial; 8% multifamily housing; 15% office/commercial; 36% retail; 1% land; and 12% mixed-use properties. The geographic mix was 22% West; 22% Midwest; 19% East; 37% South.

The firm offers open- and closed-end funds, direct investments and individual, separate accounts.

Tax-exempt clients include United Methodist Church, Unisys, Grumman and Connecticut.

The parent company is CIGNA Corp.

David R. Johnson is in charge of making property investments; Thomas P. Mahoney is client contact.

Copley Real Estate Advisors

399 Boylston St., Boston, Mass. 02116; (617) 578-1200

	($ million)
Tax-exempt real estate assets	$9,225
Equity	$9,225
Commingled or pooled funds	
Equity	$6,309
Direct, separate accounts	
Equity	$2,916
Total real estate assets	$14,894
Equity	$14,894

As of June 30, Copley Real Estate Advisors had $9.225 billion in U.S. institutional tax-exempt real estate assets, of which $9.125 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $8.992 billion as of June 30. Contributions committed but not received were $233 million.

Of the U.S. tax-exempt assets, 67% was in existing and 33% in developmental properties. The property mix was 1% hotel/resort; 41% industrial; 8% multifamily housing; 25% office/commercial; 7% retail; and 18% land. The geographic mix was 65% West; 3% Midwest; 25% East; 7% South.

The firm offers open- and closed-end funds and separate accounts; it manages the general account real estate portfolio of its parent, The New England.

The Developmental Properties Account, an open-end fund, has $1.166 billion in contributions received and invested. DPA emphasizes investments in newly developed, income-producing properties. Holdings include operating properties, projects under development and land for future development. A value-added strategy of developmental joint venturing is used. The fund is invested in industrial, office, residential and retail properties and is pursuing acquisitions of industrial and residential.

Tax-exempt clients include AT&T, Bell Atlantic, Commonwealth of Virginia and Washington.

Kevin M. Mahoney is in charge of making property investments; John C. Phillips Jr. is client contact.

Corporate Property Investors

305 E. 47th St., New York, N.Y. 10017; (212) 421-8200

	($ millions)
Tax-exempt real estate assets	$7,800
Equity	$2,744
Mortgages	$56
Commingled or pooled funds	
Equity	$2,744
Hybrid debt	$56
Total real estate assets	$5,000
Equity	$4,900
Mortgages	$100

As of June 30, Corporate Property Investors had $2.8 billion in U.S. institutional tax-exempt real estate assets, all of which was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $2.632 billion as of June 30. Contributions received but not invested were $112 million.

Of the total assets under management, $2.2 billion was invested for non-U.S. clients, including $175 million for pension funds.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 1% industrial, 10% office/commercial and 89% retail. The geographic mix was 18% West; 7% Midwest; 43% East; 32% South.

The firm offers one product, a real estate investment trust, which is open for additional investments through year end. The fund has $141 million in contributions received but not invested. The REIT specializes in superregional shopping centers.

Tax-exempt clients include AT&T, Exxon, GM and the State of Pennsylvania.

Hans C. Mautner is in charge of making property investments; William J. Lyons is client contact.

Dreyfus Realty Advisors

1180 Avenue of the Americas, 18th Floor, New York, N.Y. 10036; (212) 764-3210

	($ millions)
Tax-exempt real estate assets	$523
Equity	$487
Hybrid debt	$36
Commingled or pooled funds	
Equity	$15
Direct, separate accounts	
Equity	$472
Hybrid debt	$36
Total real estate assets	$523

As of June 30, Dreyfus Realty Advisors Inc. had $523 million in U.S. institutional tax-exempt real estate assets, of which $227 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $407 million as of June 30. Contributions committed but not received were $80 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 12% industrial; 45% office/commercial; and 43% retail. The geographic mix was 7% West; 14% Midwest; 45% East; 34% South.

The firm offers separate accounts, co-investments, project advisory and problem property asset management.

The Wal-Mart Community Shopping Centers Co-Investment Fund, a closed-end fund, has $20 million committed, but not received. The fund is designed to acquire a geographically diverse portfolio of community shopping centers, anchored in part by Wal-Mart stores.

The parent company is Dreyfus Corp.

Francis X. Tansey and David Lusk are in charge of making property investments; Paul McEvoy Jr. is client contact.

Eastdil Realty Inc.

40 W. 57th St., New York, N.Y. 10019; (212) 315-7200

	($ millions)
Tax-exempt real estate assets	$468
Equity	$444
Hybrid debt	$19
Mortgages	$5
Direct, separate accounts	
Equity	$444
Hybrid debt	$19
Mortgages	$5
Total real estate assets	$4,571
Equity	$2,288
Hybrid debt	$1,849
Mortgages	$434

As of June 30, Eastdil Realty Inc. had $468 million in U.S. institutional tax-exempt real estate assets, of which $381 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $444 million as of June 30.

Of the total assets under management, $3.571 billion was invested on behalf of Japanese clients.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 6.2% industrial; 0.2% multifamily housing; 77.1% office/commercial; and 16.5% retail. The geographic mix was 40.5% West; 3.8% East; 55.7% South.

The firm offers separate account management.

Tax-exempt clients include TREET, Virginia and New York State Employees.

Steven Karpl, Jonathan Weller and Benjamin Lambert are in charge of making property investments; Mr. Weller is client contact.

Investment management consultant profiles will run Nov. 11.

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Equitable Real Estate Investment Management

787 Seventh Ave., Area 46K, New York, N.Y. 10019; (212) 554-4213

	($ millions)
Tax-exempt real estate assets	$11,455
Equity	$10,871
Hybrid debt	$114
Mortgages	$470
Commingled or pooled funds	
Equity	$6,196
Hybrid debt	$114
Mortgages	$211
Direct, separate accounts	
Equity	$4,675
Mortgages	$259
Total real estate assets	$36,657
Equity	$22,213
Hybrid debt	$1,214
Mortgages	$13,230

As of June 30, Equitable Real Estate Investment Management Inc. had $11.455 billion in U.S. institutional tax-exempt real estate assets, all of which was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $10.78 billion as of June 30. Contributions received but not invested were $8 million; contributions committed but not received were $83 million.

Of the total assets under management, $2.436 billion was invested for non-U.S. clients, including $2.195 billion for Japanese clients.

Of the U.S. tax-exempt assets, 96.7% was in existing, 0.5% in redevelopmental, and 2.8% in developmental properties. The property mix was 1.8% hotel/resort; 13.1% industrial; 38.2% office/commercial; 45.7% retail; and 1.2% other. The geographic mix was 30.2% West; 23.7% Midwest; 26.6% East; 19.5% South.

The firm offers open- and closed-end funds, co-investment vehicles and direct, separate accounts.

The Prime Property Fund, an open-end equity separate account, has contributions received and invested of $3.54 billion and contributions received, but not invested of $8 million. The fund concentrates on investments in high-quality, income producing real property purchased for the long term, usually on a free and clear basis.

PREFER — the Real Estate Option is an open-end, equity separate account, with contributions received and invested of $23 million, and contributions received, but not invested of $2 million. PREFER purchases shares of the Prime Property Fund, while maintaining the liquidity necessary for employee choice plans.

Equitable Real Estate's Value Enhancement Fund, a closed-end equity separate account, has contributions committed but not received of $25 million. The anticipated closing date is July 31, 1992. The fund will invest in institutional-grade properties at depressed values. Existing properties with substantial potential for redevelopment, expansion, rehabilitation or renovation will be targeted, as will underutilized properties to be redeveloped to achieve highest and best use.

Tax-exempt clients include California Public Employees, California Teachers, Amoco and Underwriter's Lab.

Europolis Invest is the firm's joint venture partner for non-U.S. real estate investments.

The parent company is Equitable Life Assurance Society of the U.S.

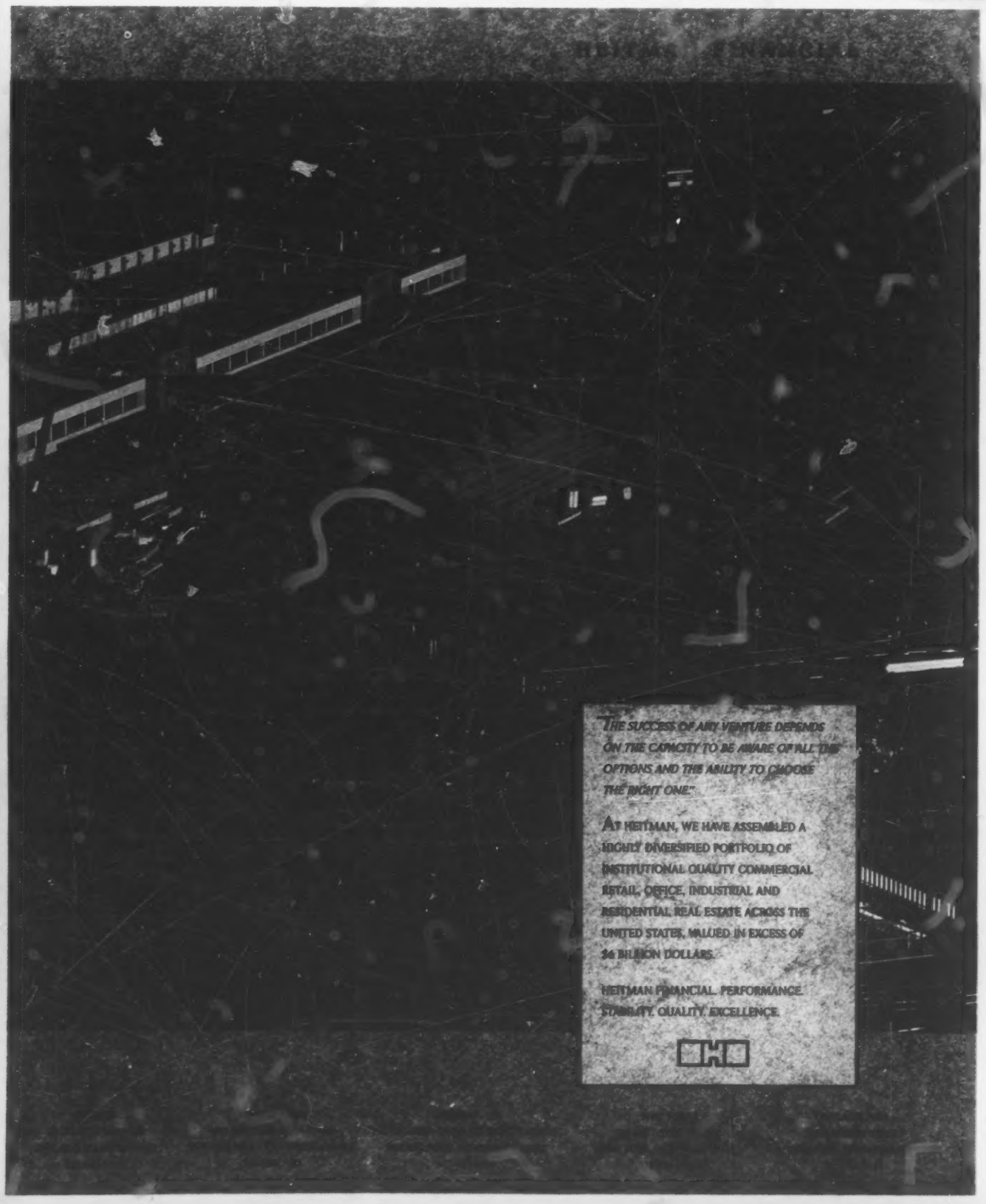
Tommy Clinton and Douglas Healy are in charge of making property investments; Paul J. Dolinoy is the client contact.

• The assets of Equitable Agri-Business Inc. are included with those of the parent company, above. Equitable Agri-Business managed $20 million as of June 30 in tax-exempt equity real estate assets. The firm managed $2.268 billion in total assets, of which $100 million was real estate equity and $2.168 billion was mortgages.

The firm offers individual, separate accounts and closed-end commingled funds. The Agricultural Properties Fund, a closed-end fund, has $10 million in contributions received and invested and $10 million committed but not yet received. The fund is expected to close July 30, 1992. The fund invests in high-grade, income-producing agricultural property diversified by crop type, geography and leasing arrangement.

The Agricultural Resources Fund, a closed-end equity separate account, has not yet received contributions or commitments. The anticipated closing date is July 30, 1992. The fund will seek to acquire a select pool of high-quality mortgages diversified by crop type, geography, loan size and borrower.

E.J. Brown is responsible for making property investments; Joyce Niggley is client contact at (404) 551-2700.



GE Investments

3003 Summer St., Stamford, Conn. 06905; (203) 326-2353

	($ millions)
Tax-exempt real estate assets	$4,998
Equity	$4,376
Hybrid debt	$222
Mortgages	$400
Commingled or pooled funds	
Equity	$1,164
Direct, separate accounts	
Equity	$3,212
Hybrid debt	$222
Mortgages	$400
Total real estate assets	$4,998

As of June 30, GE Investments had $4.998 billion in U.S. institutional tax-exempt real estate assets, all of which was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $4.01 billion as of June 30. Contributions committed but not received were $366 million.

Of the U.S. tax-exempt assets, 97% was in existing and 3% in developmental properties. The property mix was 12% hotel/resort; 8% industrial; 6% multifamily housing; 60% office/commercial; 7% retail; and 7% land and international. The geographic mix was 26% West; 10% Midwest; 39% East; 25% South.

The firm offers closed-end funds and separate account management.

Tax-exempt clients include AMR, Mead, Ford Motor and Eli Lilly.

The parent company is General Electric Co.

Joel R. Wilson is in charge of making property investments; Geoffrey R. Norman is client contact.

John Hancock Financial Services

P.O. Box 111, Boston, Mass. 02117; (617) 572-4523

	($ millions)
Tax-exempt real estate assets	$1,133
Equity	$1,128
Mortgages	$5
Commingled or pooled funds	
Equity	$224
Mortgages	$5
Direct, separate accounts	
Equity	$904
Total real estate assets	$13,947
Equity	$3,264
Mortgages	$10,683

As of June 30, John Hancock Financial Services had $1.133 billion in U.S. institutional tax-exempt real estate assets, all fully discretionary and managed by one subsidiary and two investment groups.

John Hancock Properties Inc. managed $172 million in U.S. institutional tax-exempt assets. Total real estate assets were $1.987 billion, of which $127 million was invested for non-U.S. clients, including $99 million for Japanese clients.

All of the U.S. tax-exempt assets were invested in existing properties. The property mix was 17% hotel/resort; 4.9% industrial; 34.4% multifamily; 19.4% office/commercial; 10.3% retail; 0.2% trailer parks; 4.7% land; and 9.1% other. The properties were located 12% West; 19% Midwest; 33% East; and 36% South.

The firm offers open- and closed-end funds, separate accounts and co-investments. The John Hancock Property Fund, an open-end fund, has contributions received and invested of $59 million.

Tax-exempt clients include Pennsylvania State Employes, Florida, Detroit and Connecticut.

Terrence Reed is in charge of making property investments; James McBride is client contact and may be reached at (617) 572-3800.

Hancock Agricultural Investment Group managed $37 million in real estate equity and $5 million in mortgages in U.S. institutional tax-exempt assets, of which $42 million is in fully discretionary accounts.

All of the U.S. tax-exempt assets were invested in existing agricultural and timber properties. The properties were located 30% West; 43% Midwest; 5% East; and 22% South.

The firm offers open- and closed-end funds and separate accounts. ACRE, an open-end fund, invests in equities and mortgages. ACRE 2000, a

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Represented in the U.S. by Institutional Property Consultants, Inc.

closed-end fund with an anticipated closing date of Dec. 31, will invest exclusively in equities.

Tax-exempt clients include Detroit Police and Fire and Detroit Retirement.

Paul Rennie is in charge of making property investments; Jeffrey Conrad is client contact at (617) 572-4520.

Hancock Timber Resource Group managed $919 million in real estate equity for U.S. institutional tax-exempt clients. The market value of real estate equity assets as of June 30 was $841 million; $78 million was committed, but not received. Commingled assets were $15 million; $904 million was in direct, separate accounts.

All of the U.S. tax-exempt assets were in existing timberland properties. The geographic asset mix was 54% West, 11% East and 35% South.

The firm offers closed-end funds, separate accounts and open- and closed-end separate accounts. ForesTree 2, a closed-end fund, is scheduled to close Dec. 31. No money has been committed. The fund will invest solely in quality timberlands. Portfolios will be constructed with highly productive timberlands appropriately diversified to reduce risk.

Tax-exempt clients include Hallmark, R.R. Donnelley, Detroit Police and Fire and American Hoescht.

William R. Gordon is in charge of making property investment; Richard N. Smith is client contact at (617) 572-1155.

Heitman Advisory Corp.

180 N. LaSalle St., Suite 3600,
Chicago, Ill. 60601; (312) 855-5700

	($ millions)
Tax-exempt real estate assets	$6,870
Equity	$6,870
Commingled or pooled funds	
Equity	$923
Direct, separate accounts	
Equity	$5,947
Total real estate assets	$6,870

As of June 30, Heitman Advisory Corp. had $6.87 billion in U.S. institutional tax-exempt real estate assets.

The tax-exempt equity assets had a market value of $6.35 billion as of June 30. Contributions received but not invested were $50 million; contributions committed but not received were $470 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 7.5% industrial; 1.6% multifamily housing; 38.5% office/commercial; 40.5% retail; and 11.9% mixed-use, land and parking. The geographic mix was 26.1% West; 46.1% Midwest; 21.6% East; 6.2% South.

The firm offers closed-end funds and separate account management.

The Heitman Real Estate Fund V is a closed-end fund, with an anticipated closing date of Sept. 30. The fund has contributions committed, but not received of $105 million; the fund will be capitalized with a minimum of $150 million. The fund is designed to provide a core portfolio of high-quality, existing, well-leased property, diversified by geographic area and property type. The fund will acquire interests in a diversified portfolio of 10 to 15 regional shopping centers, industrial business parks, office buildings, mixed-use properties and luxury high-rise residential properties. Properties will be acquired primarily on an equity, leveraged equity and joint-venture basis.

Tax-exempt clients include AT&T, Alaska Permanent, Iowa PERS and Pennsylvania Employes.

The parent company is Heitman Financial Services Ltd. Subsidiary is Heitman Properties Ltd.

Norman Perlmutter is in charge of making property investments; David Glickman is client contact.

INVESCO Realty Advisors

5400 LBJ Freeway, Suite 1200,
Dallas, Texas 75240; (214)
715-7400

	($ millions)
Tax-exempt real estate assets	$1,052
Equity	$132
Hybrid debt	$748
Mortgages	$172
Commingled or pooled funds	
Hybrid debt	$38
Mortgages	$9
Direct, separate accounts	
Equity	$132
Hybrid debt	$710
Mortgages	$163
Total real estate assets	$1,052

As of June 30, INVESCO Realty Advisors had $1.052 billion in U.S. institutional tax-exempt real estate assets, of which $168 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $132 million as of June 30.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 30% industrial; 25% multifamily housing; 23% office/commercial; and 22% retail. The geographic mix was 42% West; 12% Midwest; 6% East; 40% South.

The firm offers closed-end funds, separate accounts and hybrid debt management.

Tax-exempt clients include Texas Teachers, Commonwealth of Massachusetts, Stanford University and Cornell University.

The parent company is INVESCO MIM Inc. A subsidiary is MIM Property Services Ltd.

James W. Trowbridge is in charge of making property investments; David A. Ridley is client contact.

Top 10 hybrid debt managers*

Aldrich, Eastman & Waltch	2,765
J.P. Morgan	1,563
A. Brown Kleinwort Benson	1,004
L.J. Melody	763
TCW Realty	551
Total	11,837

JMB Institutional Realty

900 N. Michigan Ave., Suite 1800,
Chicago, Ill. 60611; (312) 915-1900

	($ millions)
Tax-exempt real estate assets	$9,961
Equity	$9,770
Hybrid debt	$211
Commingled or pooled funds	
Equity	$8,840
Hybrid debt	$211
Direct, separate accounts	
Equity	$930
Total real estate assets	$20,172
Equity	$9,675
Hybrid debt	$211
Mortgages	$10,086

As of June 30, JMB Institutional Realty Corp. had $9.961 billion in U.S. institutional tax-exempt real estate assets, of which $9.183 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $9.444 billion as of June 30. Contributions received but not invested were $134 million; contributions committed but not received were $192 billion.

Of the U.S. tax-exempt assets, $4.684 billion was invested in Canada as of June 30.

Of the total assets under management, $263 million was invested for non-U.S. pension funds; $4.913 billion was invested in non-U.S. properties.

Of the U.S. tax-exempt assets, 96.2% was in existing and 3.8% in developmental properties. The property mix was 0.1% hotel/resort; 2.3% industrial; 4.6% multifamily housing; 22.4% office/commercial; 53.6% retail; and 17% mixed-use properties. The geographic mix was 25.8% West; 18.9% Midwest; 36.4% East; 18.9% South.

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San Francisco: Stephen M. Steppe (415) 781-3300
Dallas: Webb Sowden, Jr. (214) 745-1701
Chicago: Donald A. King, Jr. (312) 266-9300
New York: Peter Steil (212) 688-3900

The Investment Counsel Company

We are pleased to announce that

Frank T. Guerriero

has joined the firm as Vice President,
Institutional Marketing

56 East Pine Street, Orlando, FL 32801
(800) 848-4120

The firm offers closed-end commingled funds, separate accounts and direct investments.

Tax-exempt clients include Pennsylvania State Employes, Ameritech, Kamehameha Schools/Bishop Estate and Connecticut.

The parent company is JMB Realty Corp.

Carl B. Tash is in charge of making property investments; Thomas S. Foster is client contact.

Jones Lang Wootton Realty Advisors

101 E. 52nd St., New York, N.Y. 10022; (212) 688-8181

	($ millions)
Tax-exempt real estate assets	$2,300
Equity	$2,000
Hybrid debt	$300
Direct, separate accounts	
Equity	$2,000
Hybrid debt	$300
Total real estate assets	$3,300
Equity	$2,500
Hybrid debt	$800

As of June 30, Jones Lang Wootton Realty Advisors had $2.3 billion in U.S. institutional tax-exempt real estate assets, of which $750 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.2 billion as of June 30. Contributions committed but not received were $800 million.

Of the total assets under management, $1 billion was invested for non-U.S. clients, including $200 million for pension funds.

All U.S. tax-exempt assets were in existing properties. The property mix was 10% hotel/resort; 10% industrial; 10% multifamily; 30% office/commercial; and 40% retail. The geographic mix was 20% West; 20% Midwest; 40% East; 20% South.

The firm offers separate accounts.

Tax-exempt clients include U S WEST, Wisconsin, New York State Teachers and New York State & Local.

Stephen Furnary, Charles Grossman, Frank Sullivan Jr. and John Weisz are in charge of making property investments; Darlene Jens is client contact.

Karsten Realty Advisors

12121 Wilshire Blvd., Suite 900, Los Angeles, Calif. 90025; (213) 826-0035

	($ millions)
Tax-exempt real estate assets	$937
Equity	$650
Hybrid debt	$21
Mortgages	$266
Commingled or pooled funds	
Equity	$117
Hybrid debt	$7
Direct, separate accounts	
Equity	$533
Hybrid debt	$14
Mortgages	$266
Total real estate assets	$1,062
Equity	$775
Hybrid debt	$21
Mortgages	$266

As of June 30, Karsten Realty Advisors had $937 million in U.S. institutional tax-exempt real estate assets, of which $631 million was fully discretionary.

The tax-exempt equity assets had a market value of $650 million.

Of the U.S. tax-exempt assets, 100% was in existing properties. The property mix was 7% hotel/resort; 24.7% industrial; 3.8% multifamily; 34% office/commercial; 12.1% retail; 7.8% land; and 10.6% other. The geographic mix was 53.9% West; 9.7% Midwest; 5.3% East; 31.1% South.

The firm offers separate accounts and closed-end funds; no funds are open to subscription.

Tax-exempt clients include AT&T, National Life Insurance Co., Ohio Teachers and New York State & Local.

Robert A. Foran is in charge of making property investments; John M. Lundsten and A. Redmond Doms Jr. is the client contact.

Kennedy Associates Real Estate Counsel Inc.

2400 Financial Center Building, 1215 Fourth Ave., Seattle, Wash. 98161; (206) 623-4739

	($ millions)
Tax-exempt real estate assets	$1,024
Equity	$790
Hybrid debt	$221
Mortgages	$13
Commingled or pooled funds	
Equity	$607
Hybrid debt	$112
Direct, separate accounts	
Equity	$183
Hybrid debt	$109
Mortgages	$13
Total real estate assets	$1,024

As of June 30, Kennedy Associates Real Estate Counsel Inc. had $1.024 billion in U.S. institutional tax-exempt real estate assets, of which $199 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $711 million as of June 30. Contributions received but not invested were $73 million; contributions committed but not received were $7 million.

Of the U.S. tax-exempt assets, 78% was in existing and 22% in developmental properties. The property mix was 1% hotel/resort; 44% industrial; 43% office/commercial; 6% retail; and 6% land. The geographic mix was 42% West; 29% Midwest; 23% East; and 6% South.

The firm offers an open-end fund and separate account management.

Jim Snyder is in charge of making property investments; Ron Roberts is the client contact.

Kensington Realty Advisors

541 N. Fairbanks Court, Suite 2020, Chicago, Ill. 60611; (312) 649-5950

	($ millions)
Tax-exempt real estate assets	$427
Equity	$326
Hybrid debt	$101
Direct, separate accounts	
Equity	$326
Hybrid debt	$101
Total real estate assets	$427

As of June 30, Kensington Realty Advisors Inc. had $427 million in U.S. institutional tax-exempt real estate assets, all of which was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $279 million as of June 30. Contributions committed but not received were $47 million.

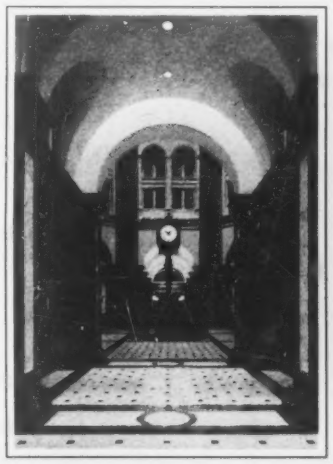
Of the U.S. tax-exempt assets, 90% was in existing and 10% in developmental properties. The property mix was 15% industrial; 9% multifamily; 27% office/commercial; 35% retail; 5% land; and 9% parking garages. The geographic mix was 1% West; 97% Midwest; 2% East.

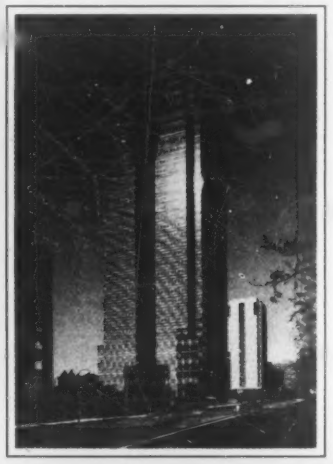
The firm offers separate account management and co-investments.

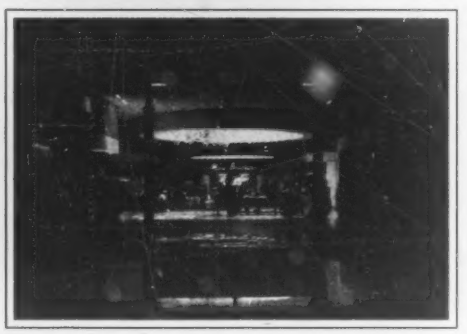
Tax-exempt clients include Illinois Teachers.

LaSalle Advisors Limited

Real Estate Investment Advisor to Qualified Tax-exempt Institutions







LaSalle Advisors Limited is a real estate investment advisor serving major tax-exempt institutions through a series of commingled funds and individually managed accounts.

LA SALLE ADVISORS
Limited
Real Estate Advisory Services
Chicago, Illinois 60603

Call Kenneth M. Campia, President at (312) 782-5800

James S. Smith and James S. Lee are in charge of making property investments; Ronald A. Gold is the client contact.

Koll Realty Advisors

4343 Von Karman Ave., Newport Beach, Calif. 92660; (714) 833-3030

	($ millions)
Tax-exempt real estate assets	$1,665
Equity	$1,663
Hybrid debt	$2
Direct, separate accounts	
Equity	$1,663
Hybrid debt	$2
Total real estate assets	$3,963
Equity	$3,848
Hybrid debt	$115

As of June 30, Koll Realty Advisors had $1.665 billion in U.S. institutional tax-exempt real estate assets, all of which was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.663 billion as of June 30.

Of the total assets under management, $159 million was invested for non-U.S. clients, including $122 million for Japanese clients.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 39% industrial; 60% office/commercial; and 1% retail. All of the investments are in the West.

The firm offers direct and separate account management.

The parent company is The Koll Co. Subsidiaries are Koll Construction.

Ed Griffin is in charge of making property investments; Jeannette Poe is client contact.

LaSalle Advisors Ltd.

11 S. LaSalle St., Chicago, Ill. 60603; (312) 782-5800

	($ millions)
Tax-exempt real estate assets	$5,120
Equity	$5,120
Commingled or pooled funds	
Equity	$2,740
Direct, separate accounts	
Equity	$2,380
Total real estate assets	$5,120

As of June 30, LaSalle Advisors Ltd. had $5.12 billion in U.S. institutional tax-exempt real estate assets, of which $3 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $4.085 billion as of June 30. Contributions committed but not received were $1.035 billion.

Of the U.S. tax-exempt assets, 95% was in existing and 5% in developmental properties. The property mix was 8% industrial; 76% office/commercial; and 16% retail. The geographic mix was 26% West; 26% Midwest; 34% East; 14% South.

The firm offers a series of closed-end commingled funds investing in core properties and a series of specialty closed-end commingled funds, as well as separate account management.

The LaSalle Fund V, a closed-end fund scheduled to close in the fourth quarter of 1992, has not yet received commitments for contributions. The fund will acquire on an equity basis large, high-quality office buildings, regional shopping centers and industrial properties on a national basis.

Tax-exempt clients include Bell Atlantic, Illinois Municipal, Public Service Electric and Gas, and Ohio Teachers.

The parent company is LaSalle Partners Ltd.

Kenneth M. Campia is in charge of making property investments; J. Marshall Peck is client contact.

Latimer & Buck Inc.

121 S. Broad St., Philadelphia, Pa. 19107; (215) 985-3917

	($ millions)
Tax-exempt real estate assets	$1,437
Equity	$282
Hybrid debt	$491
Mortgages	$664
Direct, separate accounts	
Equity	$282
Hybrid debt	$491
Mortgages	$664
Total real estate assets	$1,437

As of Dec. 31, Latimer & Buck Inc. had $1.437 billion in U.S. institutional tax-exempt real estate assets, of which $731 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $282 million as of Dec. 31.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 3.3% hotel/resort; 7.7% industrial; 3.5% multifamily; 48.6% office/commercial; 7% retail; and 29.9% other. The geographic mix was 2% West; 18% Midwest; 74% East; 6% South.

The firm offers separate account investments in real estate equity and mortgage portfolios, with a primary emphasis in participating mortgages on office, retail, industrial and apartment properties.

Tax-exempt clients include Pennsylvania State Employes and Pennsylvania School Employes.

The parent company is Legg Mason.

Richard J. Humphreys is in charge of making property investments; M. Andrew Sheffler is client contact.

Master trust directory: Oct. 14.

Lehndorff & Babson Real Estate Counsel

2501 Cedar Springs Road, Suite 350, Dallas, Texas 75201; (214) 855-5630

	($ millions)
Tax-exempt real estate assets	$1,935
Equity	$1,766
Hybrid debt	$169
Commingled or pooled funds	
Equity	$817
Hybrid debt	$141
Direct, separate accounts	
Equity	$949
Hybrid debt	$28
Total real estate assets	$3,681
Equity	$3,490
Hybrid debt	$191

As of June 30, Lehndorff & Babson Real Estate Counsel had $1.935 billion in U.S. institutional tax-exempt real estate assets, of which $958 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.696 billion as of June 30. Contributions received but not invested were $20 million; contributions committed but not received were $50 million.

Of the total assets under management, $1.407 billion was invested for non-U.S. clients, including $109 million for pension funds and $409 million for Japanese clients.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 2.5% industrial; 49.6% office/commercial; 46.3% retail; and 1.6% land. The geographic mix was 20.3% West; 6.9% Midwest; 60.3% East; 12.5% South.

The firm offers open- and closed-end funds, and separate account management.

The Lehndorff & Babson Property Fund V is a closed-end fund with an anticipated closing date of June 30, 1992. No commitments have been received yet. The Council of Real Estate Group Trust (CORE) is an open-end fund with $462 million in contributions received and invested from four participants. The Lehndorff & Babson CORE II Fund is an open-end fund that has not yet received commitments. The investment style for each commingled fund is to invest in substantially leased, well-located income-producing properties in major metropolitan markets. The focus is on properties that will produce a predictable income stream for the foreseeable future.

Tax-exempt clients include Nevada Public Employees, Ford Motor, New York State Teachers and Southern California Food & Commercial Workers.

The parent company is the Lehndorff Group.

M. Thomas Lardner is in charge of making property investments; G. Andrews Smith is client contact.

Top 10 mortgage managers*

McMorgan	1,600
Latimer & Buck**	664
Aldrich, Eastman & Waltch	605
AFL-CIO Housing & Bldg.	463
GE Investments	400
Total	6,601

McMorgan and Co.

1 Bush St., Suite 800, San Francisco, Calif. 94104; (415) 788-9300

	($ millions)
Tax-exempt real estate assets	$2,030
Equity	$350
Hybrid debt	$80
Mortgages	$1,600
Direct, separate accounts	
Equity	$350
Hybrid debt	$80
Mortgages	$1,600
Total real estate assets	$2,030

As of June 30, McMorgan and Co. had $2.03 billion in U.S. institutional tax-exempt real estate assets, all fully discretionary.

The tax-exempt equity assets had a market value of $300 million as of June 30. Contributions received but not invested were $50 million.

All assets were in existing properties. The property mix was 7.5% industrial; 1.5% multifamily; 18% office/commercial; 9% retail; 60% single family housing; and 4% land. The geographic mix was 100% West.

The firm offers separate accounts.

Dan O'Donnell is in charge of making property investments.

Mellon/McMahan Real Estate Advisors Inc.

444 Market St., Suite 2100, San Francisco, Calif. 94111; (415) 433-7770

	($ millions)
Tax-exempt real estate assets	$953
Equity	$712
Hybrid debt	$135

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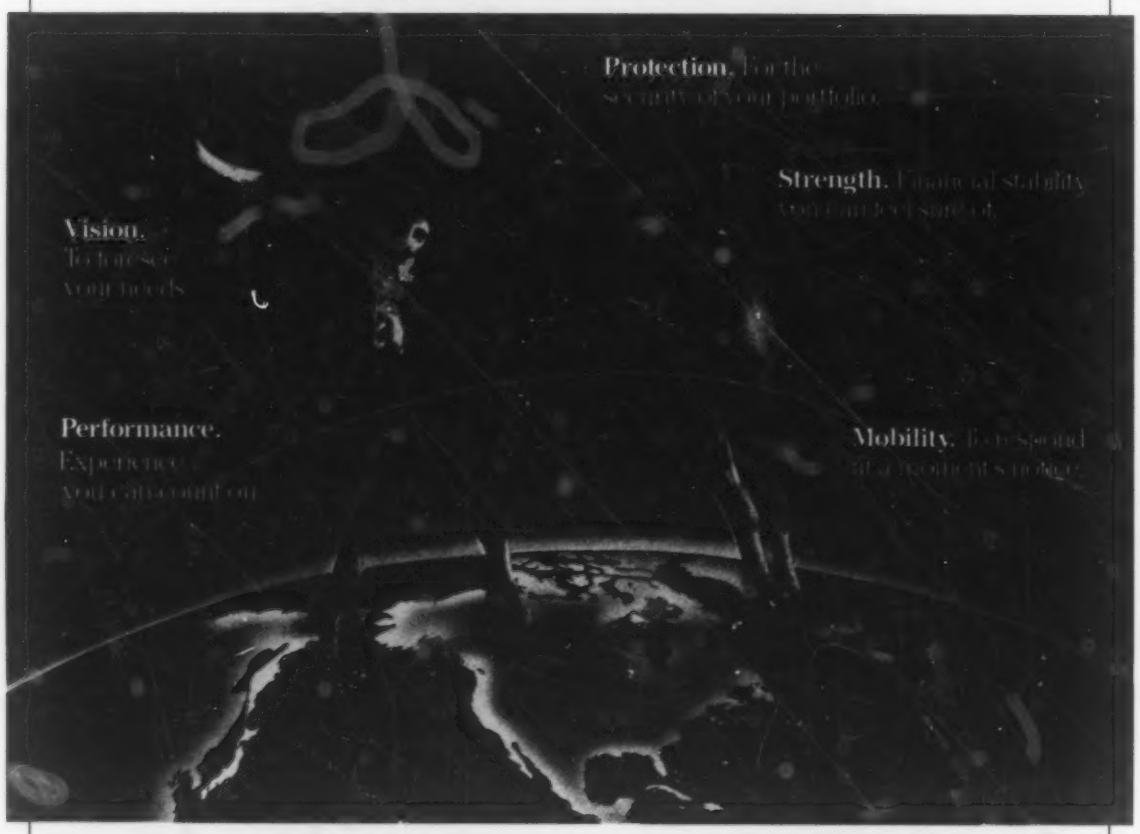

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The Prudential Global Real Estate Investment Programme

announces the acquisition of

Bishopsgate Exchange
155 Bishopsgate
London EC2

from

Rosehaugh Stanhope Developments

The Programme was advised by Global Realty Advisers, a partnership between Jones Lang Wootton International and The Prudential Insurance Company of America

CPA

We are pleased to announce the election of

Frank J. Hoenemeyer

former Vice Chairman and Chief Investment Officer of
The Prudential Insurance Company of America as a

Director

and member of the Investment Committee of
our affiliated funds which invest in net
leased corporate real estate

Corporate Property Associates

The Investment Committee

Frank J. Hoenemeyer — Lawrence R. Klein

George E. Stoddard — Madelon DeVoe Talley

W. P. CAREY

LEADING PURCHASERS OF CORPORATE PROPERTIES
W. P. Carey & Co., Inc.
620 FIFTH AVENUE, NEW YORK, NEW YORK 10020
1-212-492-1100

	($ millions)
Mortgages	$106
Direct, separate accounts	
Equity	$712
Hybrid debt	$135
Mortgages	$106
Total real estate assets	$1,103
Equity	$812
Hybrid debt	$171
Mortgages	$120

As of June 30, Mellon/McMahan Real Estate Advisors, Inc. had $953 million in U.S. institutional tax-exempt real estate assets, of which $666 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $642 million as of June 30. Contributions committed but not received were $64 million.

Of the total assets under management, $25 million was invested for non-U.S. clients.

Of the U.S. tax-exempt assets, 100% were in existing properties. The property mix was 0.4% hotel/resort; 30.4% industrial; 3.6% multifamily; 33.1% office/commercial; and 32.5% retail. The geographic mix was 68.8% West; 14.4% Midwest; 7% East; 9.8% South.

The firm offers separate accounts.

Tax-exempt clients include Westinghouse Electric, NYNEX, Southwestern Bell and Contra Costa County Employees.

The parent company is Mellon Bank N.A.

James H. Ida is in charge of making property investments; Barry Rilliet and Linda Spackman are client contacts.

L.J. Melody & Co.

5847 San Felipe, Suite 4400, Houston, Texas 77057; (713) 787-1900

	($ millions)
Tax-exempt real estate assets	$1,941
Equity	$137
Hybrid debt	$763
Mortgages	$1,041
Direct, separate accounts	
Equity	$137
Hybrid debt	$763
Mortgages	$1,041
Total real estate assets	$2,600
Equity	$137
Hybrid debt	$763
Mortgages	$1,700

As of June 30, L.J. Melody & Co. had $1.941 billion in U.S. institutional tax-exempt real estate assets; none was full discretionary.

The tax-exempt equity assets had a market value of $137 million as of June 30.

Of the U.S. tax-exempt assets, all were in existing properties. The property mix was 10% industrial; 10% multifamily; 40% office/commercial; and 40% retail. The geographic mix was 16% West; 5% Midwest; 5% East; 72% South.

The firm offers separate accounts.

Tax-exempt clients include Texas Teachers.

Robert D. Barkley is in charge of making property investments and the client contact.

Metric Institutional Realty Advisors

950 Tower Lane, Foster City, Calif. 94404; (415) 378-7000

	($ millions)
Tax-exempt real estate assets	$662
Equity	$639
Hybrid debt	$10
Mortgages	$13
Commingled or pooled funds	
Equity	$294
Hybrid debt	$10
Mortgages	$13
Direct, separate accounts	
Equity	$345
Total real estate assets	$2,328
Equity	$2,305
Hybrid debt	$10
Mortgages	$13

As of June 30, Metric Institutional Realty Advisors had $662 million in U.S. institutional tax-exempt real estate assets, of which $639 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $345 million as of June 30. Contributions committed but not received were $294 million.

Of the U.S. tax-exempt assets, 100% was in existing properties. The property mix was 9% industrial; 59% multifamily; 14% office/commercial; and 18% retail. The geographic mix was 36% West; 11% Midwest; 17% East; 36% South.

The firm offers closed-end funds, co-investment programs and advisory accounts.

Metric Institutional Apartment Fund II is a closed-end fund with an anticipated closing date of Dec. 31. The fund has commitments not received of $60 million. The fund is a limited partnership investing in to-be-built and to 5-year-old, institutional-quality, garden-style apartment properties. Some 22 markets have been identified for potential investment, with approximately $65 million in properties prespecified.

Tax-exempt clients include the Alaska Permanent Fund, Atlantic Richfield, California PERS and City and County of San Francisco.

The parent company is Metric Realty/Metropolitan Life Insurance Co.

W. Patrick McDowell is in charge of making property investments; Robert A. Fiddaman is client contact.

Metropolitan Life Insurance

1 Madison Ave., New York, N.Y. 10010; (212) 578-4970

	($ millions)
Tax-exempt real estate assets	$989
Equity	$989
Commingled or pooled funds	
Equity	$655
Direct, separate accounts	
Equity	$334
Total real estate assets	$29,223
Equity	$13,089
Mortgages	$16,134

As of June 30, Metropolitan Life Insurance Co. had $989 million in U.S. institutional tax-exempt real estate assets, of which $841 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $887 million as of June 30. Contributions received but not invested were $95 million; contributions committed but not received were $7 million.

Of the total assets under management, $521 million was invested for Japanese clients.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 15% industrial; 24% multifamily; 22% office/commercial; 17% retail; 2% mixed-use properties; and 20% R&D. The geographic mix was 38% West; 16% Midwest; 21% East; 25% South.

The firm offers two open-end commingled funds and individual, separate accounts.

The Tower Fund, an open-end fund, has contributions received and invested of $319 million; contributions received but not invested of $74 million; and $1 million in contributions committed but not received. The fund makes equity investments in wholly owned, operating and substantially leased properties, diversified by type and location. The fund targets acquisitions in established and emerging markets with future supply constraints and/or compelling demographics. The portfolio is limited to 75 properties.

The Defined Contribution Real Estate Account (DCRE), an open-end account, has $100 million in contributions received and invested and $5 million in contributions received, but not invested. The fund is available only to defined contribution plan investors and guarantees liquidity of plan participant balances. The fund acquires primarily well-leased, unleveraged apartment, warehouse/light industrial, retail and office properties nationwide.

Tax-exempt clients include Hawaii Employees, Oregon Employes, United Mine Workers and Kodak.

The firm's non-U.S. joint venture partners in real estate investments consist of 22 Japanese financial institutions.

The firm's subsidiaries are Century 21, Metric Institutional Realty Advisors, Metmor Financial Inc. and Farmers National Co.

James B. Digney is in charge of making property investments; Michael J. Walker is client contact.

This announcement appears as a matter of record only.

September, 1991

American Industrial Partners

announces the closing of

American Industrial Partners Capital Fund, L.P.

$217,000,000

A limited partnership formed to invest in American Industry; manufacturing, processing, service and distribution companies.

For further information please contact:

W. Richard Bingham
One Maritime Plaza
Suite 2475
San Francisco, CA 94111
(415) 788-7354

Theodore C. Rogers
200 Park Avenue
Suite 3122
New York, NY 10166
(212) 983-1399

Tax-exempt assets in non-U.S. property

GE Investments	148
A. Brown Kleinwort Benson	34
PSI Institutional	9
Total	4,976

MIG Realty Advisors Inc.

1645 Palm Beach Lakes Blvd., Suite 600, West Palm Beach, Fla. 33401; (407) 686-1800

	($ millions)
Tax-exempt real estate assets	$1,342
Equity	$758
Hybrid debt	$333
Mortgages	$251
Commingled or pooled funds	
Equity	$594
Direct, separate accounts	
Equity	$164
Hybrid debt	$333
Mortgages	$251
Total real estate assets	$1,342

As of June 30, MIG Realty Advisors Inc. had $1.342 billion in U.S. institutional tax-exempt real estate assets, of which $594 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $730 million as of June 30. Contributions received but not invested were $28 million.

Of the U.S. tax-exempt assets, 89% was in existing and 11% in developmental properties. The property mix was 9% hotel/resort; 10% industrial; 34% multifamily; 26% office/commercial; 17% retail; and 4% self-storage. The geographic mix was 32% West; 34% Midwest; 11% East; 23% South.

The firm offers closed-end commingled funds and separate account management.

The MIG Residential Trust II, a closed-end fund, is scheduled to close July 31, 1992. No contributions have been committed to date. The fund intends to acquire, develop and operate a geographically diversified portfolio of apartment buildings and complexes at the ratio of approximately 25% developmental and 75% mature properties. Investments are to be primarily equity interests.

Tax-exempt clients include the Philadelphia Board of Pensions, City of Detroit, Detroit Policemen and Firemen, and Inland Steel.

Subsidiaries of the firm are MIG Capital Services Inc. and Northstar Management Co.

Robert J. Gauthier is in charge of making property investments; James A. Cote is client contact.

J.P. Morgan Investment Management Inc.

522 Fifth Ave., New York, N.Y. 10036; (212) 837-1260

	($ millions)
Tax-exempt real estate assets	$2,183
Equity	$620
Hybrid debt	$1,563
Commingled or pooled funds	
Equity	$581
Hybrid debt	$1,476
Direct, separate accounts	
Equity	$39
Hybrid debt	$87
Total real estate assets	$2,304
Equity	$620
Hybrid debt	$1,684

As of June 30, J.P. Morgan Investment Management Inc. had $2.183 billion in U.S. institutional tax-exempt real estate assets, of which $2.095 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $333 million as of June 30. Contributions received but not invested were $287 million.

Of the total assets under management, $121 million was invested for non-U.S. clients, including $86 million for Japanese clients.

Of the U.S. tax-exempt assets, 88% was in existing and 12% in developmental properties. The property mix was 2% hotel/resort; 22% industrial; 1% multifamily; 39% office/commercial; and 36% retail. The geographic mix was 5% West; 14% Midwest; 63% East; 18% South.

The firm offers direct, separate account management and an open-end commingled account.

The Real Estate Fund, an open-end commingled

fund, has contributions received and invested of $1.361 billion and contributions received but not invested of $696 million. The fund is primarily a portfolio of direct real estate investments. The fund selects properties with above-average potential for income growth and capital appreciation. The potential is realized through active management, property development and redevelopment. The fund invests primarily in urban and suburban office buildings, regional shopping centers and industrial/R&D buildings. Properties are selected to provide diversification by property type and location, as well as for promising development potential.

The parent company is J.P. Morgan & Co. Inc.

Timothy J. Heise is in charge of making property investments; Erling Asheim is client contact.

Investment management consultant profiles will run Nov. 11.

NCNB

1 NCNB Plaza, T10-10, Charlotte, N.C. 28255; (704) 386-5115

	($ millions)
Tax-exempt real estate assets	$702
Equity	$625
Hybrid debt	$75
Mortgages	$2
Commingled or pooled funds	
Equity	$419
Hybrid debt	$69
Direct, separate accounts	
Equity	$206
Hybrid debt	$6
Mortgages	$2
Total real estate assets	$702

As of June 30, NCNB had $702 million in U.S. institutional tax-exempt real estate assets, of which $659 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $625 million as of June 30.

Also as of June 30, $27 million was invested in the United Kingdom as of June 30.

Of the assets, 56% was in existing and 44% in developmental properties. The property mix was 4.4% multifamily; 58.4% office/commercial; and 37.2% land. The geographic mix was 54% East and 46% South.

The firm offers open- and closed-end funds and separate account management.

The parent company is NCNB Corp.

Floyd T. Boyce is in charge of making property investments; James D. Wahl (Southwest) and F. Huling Poston (Southeast) are client contacts.

The O'Connor Group

200 Park Ave., New York, N.Y. 10166; (212) 687-7420

	($ millions)
Tax-exempt real estate assets	$1,980
Equity	$1,825
Hybrid debt	$155
Commingled or pooled funds	
Equity	$1,128
Direct, separate accounts	
Equity	$897
Hybrid debt	$155
Total real estate assets	$2,229
Equity	$2,074
Hybrid debt	$155

As of June 30, The O'Connor Group had $1.98 billion in U.S. institutional tax-exempt real estate assets, of which $1.324 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.605 billion as of June 30. Contributions received but not invested were $141 million; contributions committed but not received were $79 million.

Of the U.S. tax-exempt assets, 70% was in existing and 30% in developmental properties. The property mix was 12% industrial; 11% office/commercial; 78% retail; and 1% mixed use. The geographic mix was 18% West; 30% Midwest; 12% East; 40% South.

The firm offers separate accounts and closed-end funds; no funds are open to new subscriptions.

Tax-exempt clients include California Teachers, AT&T and Bell Atlantic.

Subsidiaries are O'Connor Realty Advisors and O'Connor Management Inc.

Ben Gifford and Glenn Rufran are in charge of making property investments; Nancy I. Lashine is client contact.

PMRealty Advisors

800 Newport Center Drive, Suite 300, Newport Beach, Calif. 92660; (714) 721-5000

	($ millions)
Tax-exempt real estate assets	$615
Equity	$615
Commingled or pooled funds	
Equity	$318
Direct, separate accounts	
Equity	$297
Total real estate assets	$655
Equity	$655

As of June 30, PMRealty Advisors had $615 million in U.S. institutional tax-exempt real estate assets, of which $532 million was fully discretionary.

The tax-exempt equity assets had a market value of $487 million as of June 30. Contributions received but not invested were $28 million; contributions committed but not received were $100 million.

Of the U.S. tax-exempt assets, 100% was in existing properties. The property mix was 31% industrial; 39% office/commercial; 21% retail; and 9% mobile home parks. The geographic mix was 60% West; 18% Midwest; 7% East; 15% South.

The firm offers commingled funds, separate accounts, joint ventures and limited partnerships. No commingled funds are open.

Tax-exempt clients include Nevada PERS, Washington, Eastman Kodak and United Airlines.

The parent company is Pacific Financial Asset Management Co.

James G. McWalters is in charge of making property investments; Jody Elliott is client contact.

Prentiss Properties Realty Advisors Inc.

1717 Main St., Suite 5000, Dallas, Texas 75201; (214) 761-1440

	($ millions)
Tax-exempt real estate assets	$602
Equity	$602
Commingled or pooled funds	
Equity	$602
Total real estate assets	$679
Equity	$679

As of June 30, Prentiss Properties Realty Advisors Inc. had $602 million in U.S. institutional tax-exempt real estate assets, of which $500 was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $525 million as of June 30. Contributions received but not invested were $4 million; contributions committed but not received were $73 million.

Of the U.S. tax-exempt assets, 66% was in existing and 34% in developmental properties. The property mix was 31% industrial; 35% office/commercial; 1% retail; and 33% land. The geographic mix was 32% West; 7% Midwest; 18% East; 43% South.

The firm offers closed-end funds and separate accounts.

Tax-exempt clients include Exxon, Ameritech, Idaho PERS and American Airlines.

Joshua M. Brown is in charge of making property investments and the client contact.

Property Capital Associates

1 Post Office Square, Boston, Mass. 02109; (617) 451-2400

	($ millions)
Tax-exempt real estate assets	$1,269
Equity	$1,269
Commingled or pooled funds	
Equity	$1,163
Direct, separate accounts	
Equity	$106
Total real estate assets	$1,269

As of June 30, Property Capital Associates had $1.269 billion in U.S. institutional tax-exempt real estate assets, all of which was fully discretionary.

The tax-exempt equity assets had a market value of $1.193 billion as of June 30. Contributions committed but not received were $76 million.

Of the U.S. tax-exempt assets, 100% was in existing properties. The property mix was 6% hotel/resort; 24% industrial; 15% multifamily; 41% office/commercial; and 14% retail. The geographic mix was 40% West; 26% Midwest; 24% East; 10% South.

The firm offers closed-end funds, separate accounts and co-investments.

Tax-exempt clients include Maine, Allied-Signal, World Bank and Harvard University.

Anthony D. Fox is in charge of making property investments; Gary R. Schwandt is the client contact.

Prudential Real Estate Investors

3 Prudential Plaza, 751 Broad St., Newark, N.J. 07102; (201) 802-3401

	($ millions)
Tax-exempt real estate assets	$5,634
Equity	$5,240
Hybrid debt	$136
Mortgages	$258
Commingled or pooled funds	
Equity	$4,242
Hybrid debt	$64
Mortgages	$158
Direct, separate accounts	
Equity	$998
Hybrid debt	$72
Mortgages	$100
Total real estate assets	$40,079
Equity	$13,188
Hybrid debt	$155
Mortgages	$26,736

As of June 30, Prudential Real Estate Investors had $5.634 billion in U.S. institutional tax-exempt real estate assets, of which $5.539 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $4.624 billion as of June 30. Contributions received but not invested were $215 million; contributions committed but not received were $401 million.

Of the U.S. tax-exempt assets, 99.9% was in existing and 0.1% in developmental properties. The property mix was 9.6% hotel/resort; 18.8% industrial; 12.5% multifamily; 37% office/commercial; 21% retail; and 1.1% agricultural land. The geographic mix was 34.4% West; 14.4% Midwest; 38.1% East; 13.1% South.

The firm offers open- and closed-end funds and separate accounts.

Prudential Property Investment Separate Account (PRISA), an open-end fund, has assets of $3.146 billion. It is a broadly diversified, core portfolio investing in completed, well-leased, investment-grade equity real estate.

Union Mortgage Account (UMA), an open-end fund, has assets of $148 million invested primarily in fixed-rate mortgages and construction loans on to-be-built or substantially renovated by 100% union labor.

Strategic Performance Fund-I, a closed-end equity account, has assets of $31 million. An additional $100 million is committed but not received. The fund is scheduled to close Dec. 31. The fund will acquire existing and to-be-completed apartment, industrial and office properties in markets identified as having superior growth potential.

Tax-exempt clients include Chevron, Colorado PERS, Florida and Western Conference of Teamsters.

The parent company is Prudential Insurance Co. of America.

Claude Zinngrabe is in charge of making property investments; Kevin Myers is the client contact.

PSI Institutional Realty

600 N. Brand Blvd., Suite 300, Glendale, Calif. 91203; (818) 244-8080

	($ millions)
Tax-exempt real estate assets	$728
Equity	$728
Commingled or pooled funds	
Equity	$451
Direct, separate accounts	
Equity	$277
Total real estate assets	$3,247
Equity	$2,947
Mortgages	$300

As of June 30, PSI Institutional Realty, a division of Public Storage Inc., had $728 million in U.S. institutional tax-exempt real estate assets, none fully discretionary.

The tax-exempt equity assets had a market value of $682 million as of June 30. Contributions received, but not invested were $14 million; contributions committed but not received were $32 million.

Of the U.S. tax-exempt assets, $9 million was invested in Canada as of June 30.

Of the total assets under management, $210 million was invested for non-U.S. clients, including $45 million for pension funds.

Of the U.S. tax-exempt assets, 100% was in developmental properties. The property mix was 100% self-storage facilities. The geographic mix was 43% West; 21% Midwest; 29% East; 7% South.

The firm offers closed-end funds and separate accounts. No fund are open to subscription.

Tax-exempt clients include Ameritech, Ford, Los Angeles County and GTE Service.

Hugh Horne is in charge of making property investments; William J. Chadwick is client contact.

Managers with non-U.S. clients

Eastdil Realty	3,571
UBS Asset Mgmt. (N.Y.)	2,685
Corporate Property	2,200
Jones Lang Wootton	1,000
RREEF	539
Trammell Crow	308
PSI Institutional	210
Koll Realty	159
J.P. Morgan	121
Coventry Investment	28
Loeb Partners Realty	20
American Agricultural	9
Total	19,852

RREEF

650 California St., Suite 1800, San Francisco, Calif. 94108; (415) 781-3300

	($ millions)
Tax-exempt real estate assets	$3,421
Equity	$3,372
Mortgages	$49
Commingled or pooled funds	
Equity	$2,651
Mortgages	$10
Direct, separate accounts	
Equity	$721
Mortgages	$39
Total real estate assets	$4,287
Equity	$4,225
Mortgages	$62

As of June 30, RREEF had $3.421 billion in U.S. institutional tax-exempt real estate assets, of which $2.483 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $3.198 billion as of June 30. Contributions committed but not received were $174 million.

Of the U.S. tax-exempt assets, $69 million was invested in Canada as of June 30.

Of the total assets under management, $539 million was invested for non-U.S. pension funds.

Of the U.S. tax-exempt assets, 97% was in existing and 3% in developmental properties. The property mix was 28% industrial; 3% multifamily; 34% office/commercial; and 35% retail. The geographic mix was 40% West; 27% Midwest; 18% East; 15% South.

The firm offers closed-end funds, co-investments and separate account management.

RREEF Apartment II will purchase high-quality apartment buildings of between $10 million and $30 million in select major metropolitan areas in the United States.

Tax-exempt clients include Ameritech, Colorado Fire & Police and New York State State & Local.

Stephen M. Stappe is in charge of making property investments.

Schroder Real Estate Associates

437 Madison Ave., New York, N.Y. 10022; (212) 486-9800

	($ millions)
Tax-exempt real estate assets	$700
Equity	$700
Commingled or pooled funds	
Equity	$800
Direct, separate accounts	

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Equity	$100
Total real estate assets	$1,500
Equity	$1,500

As of June 30, Schroder Real Estate Associates had $700 million in U.S. institutional tax-exempt real estate assets, of which $450 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $400 million as of June 30. Contributions committed but not received were $300 million.

Of the total assets under management, $800 million was invested for non-U.S. clients, including $500 million for pension funds.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 3% industrial; 37% office/commercial; and 60% retail. The geographic mix was 19% West; 8% Midwest; 36% East; 37% South.

The firm offers closed-end funds, co-investments and separate account management.

Schroder Real Estate Value-Enhancement Fund B, L.P., a closed-end fund, has contributions committed, but not received of $110 million. The fund is scheduled to close in December. The fund will opportunistically acquire underutilized regional malls, urban offices and industrial property that can be responsive to intensive direct property/construction management and leasing.

Tax-exempt clients include Kodak, Philip Morris, 3M and N.Y. State & Local.

Norman L. Peck is in charge of making property investments; John Emmanuel and Linda Wooldridge are client contacts.

Sentinel Real Estate Corp.

1290 Avenue of the Americas, New York, N.Y. 10104; (212) 408-2900

	($ millions)
Tax-exempt real estate assets	$1,785
Equity	$1,713
Mortgages	$72
Commingled or pooled funds	
Equity	$781
Mortgages	$67
Direct, separate accounts	
Equity	$932
Mortgages	$5
Total real estate assets	$2,286
Equity	$2,186
Mortgages	$100

As of June 30, Sentinel Real Estate Corp. had $1.785 billion in U.S. institutional tax-exempt real estate assets, of which $1.263 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.407 billion as of June 30. Contributions committed but not received were $306 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 6% industrial; 77% multifamily; 7% office/commercial; and 10% retail. The geographic mix was 39% West; 14% Midwest; 10% East; 37% South.

The firm offers open- and closed-end commingled funds and separate account management.

SRE Real Estate Fund, an open-end fund, has $750 million from 107 investors. The fund seeks to acquire garden apartment, office, retail and industrial properties in the $5 million to $25 million range, with high current income and potential for value enhancement.

SRE Realty Partners II is a closed-end fund with $16 million in contributions. The fund focuses on acquisition of new apartment properties in the $5 million to $20 million range with potential for capital appreciation and value enhancement.

Tax-exempt clients include Ohio Employees, Michigan, Alaska and Maryland.

John H. Streicker is in charge of making property investments; David Weiner is client contact.

State Street Bank and Trust

225 Franklin St., Boston, Mass. 02110; (617) 654-3953

	($ millions)
Tax-exempt real estate assets	$430
Equity	$249
Hybrid debt	$181
Commingled or pooled funds	
Equity	$249
Hybrid debt	$181
Total real estate assets	$520
Equity	$301
Hybrid debt	$219

As of June 30, State Street Bank and Trust Co. had $430 million in U.S. institutional tax-exempt real estate assets, all fully discretionary.

All were managed on its behalf by Aldrich, Eastman & Waltch in a series of closed-end funds. See listing for Aldrich, Eastman & Waltch.

Tax-exempt clients include CBS, GTE, World Bank and Wisconsin Electric.

The parent company is State Street Boston Corp.

Robert E. Kilroy is in charge of making property investments; Peter Braun is client contact.

TCW Realty Advisors

400 S. Hope St., Suite 600, Los Angeles, Calif. 90071-2899; (213) 683-4200

	($ millions)
Tax-exempt real estate assets	$4,209
Equity	$3,658
Hybrid debt	$551
Commingled or pooled funds	
Equity	$1,934
Hybrid debt	$290
Direct, separate accounts	
Equity	$1,724
Hybrid debt	$261
Total real estate assets	$4,209

As of June 30, TCW Realty Advisors had $4.209 billion in U.S. institutional tax-exempt real estate assets, of which $2.885 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $3.256 billion as of June 30. Contributions received but not invested were $50 million; contributions committed but not received were $350 million.

Of the U.S. tax-exempt assets, 99% was in existing and 1% in developmental properties. The property mix was 30% industrial; 40% office/commercial; 25% retail; and 5% zoned urban land. The geographic mix was 58% West; 12% Midwest; 23% East; 7% South.

The firm offers closed-end funds and separate accounts.

Tax-exempt clients include California Teachers, Pacific Telesis, New York State & Local, and McDonnell Douglas.

The firm is a joint venture with Trust Co. of the West.

Richard Pink is in charge of making property investments; Bruce Ludwig is client contact.

Trammell Crow Realty Advisors

3500 Trammell Crow Center, 2001 Ross Ave., Dallas, Texas 75201-2997; (214) 979-5202

	($ millions)
Tax-exempt real estate assets	$1,773
Equity	$1,773
Commingled or pooled funds	
Equity	$1,521
Direct, separate accounts	
Equity	$252
Total real estate assets	$2,632
Equity	$2,602
Mortgages	$30

As of June 30, Trammell Crow Realty Advisors had $1.773 billion in U.S. institutional tax-exempt real estate assets, of which $1.521 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.229 billion as of June 30. Contributions committed but not received were $544 million.

Of the total assets under management, $308 million was invested for Japanese clients.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 2% hotel/resort; 7% industrial; 1% multifamily; 78% office/commercial; 6% retail; and 6% land. The geographic mix was 28% West; 4% Midwest; 32% East; 36% South.

The firm offers closed-end funds and separate account management.

Tax-exempt clients include Ameritech, DuPont, Michigan and First Plaza Group Trust.

The parent company is Trammell Crow Ventures. Subsidiaries are Trammell Crow Residential and Trammell Crow Interests.

Thomas J. O'Gara is in charge of making property investments; Stanislaw Maliszewski is client contact.

Union Labor Life Insurance

111 Massachusetts Ave. N.W., Washington, D.C. 20001; (202) 682-0900

	($ millions)
Tax-exempt real estate assets	$459
Mortgages	$459
Commingled or pooled funds	
Mortgages	$459
Total real estate assets	$459

As of June 30, Union Labor Life Insurance Co. had $459 million in U.S. institutional tax-exempt real estate assets, all discretionary.

The firm offers Separate Account J, an open-end mortgage account on properties built or renovated by union labor, which had $295 million in contributions received and invested and $164 million in contributions received, but not invested. The fund invests in a diversified mortgage portfolio and seeks to provide a means of reversing unfavorable trends in unemployment by stimulating the construction industry and union construction jobs.

The parent company is ULLICO Inc.

Tim Durkin is in charge of making property investments; Fred Burke is client contact.

Wells Fargo Realty Advisors

600 Montgomery St., 29th Floor, MAC 0116-292, San Francisco, Calif. 94163; (415) 396-6222

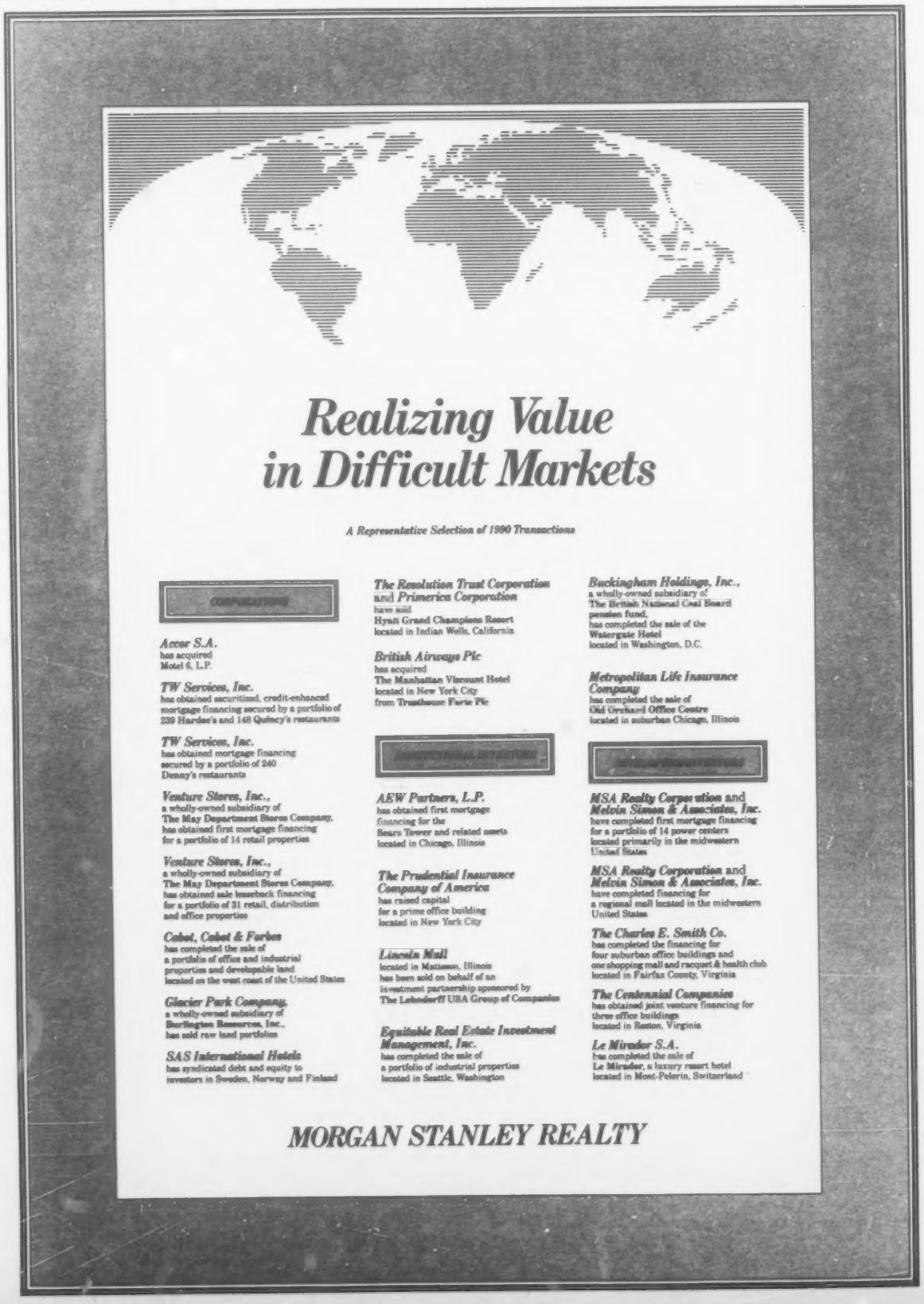
	($ millions)
Tax-exempt real estate assets	$683
Equity	$501
Hybrid debt	$181
Mortgages	$1
Commingled or pooled funds	
Equity	$137
Hybrid debt	$55
Mortgages	$1
Direct, separate accounts	
Equity	$364
Hybrid debt	$126
Total real estate assets	$683

As of June 30, Wells Fargo Realty Advisors had $683 million in U.S. institutional tax-exempt real estate assets, of which $193 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $353 million as of June 30. Contributions received but not invested were $36 million; contributions committed but not received were $112 million.

Of the U.S. tax-exempt assets, 63% was in existing and 37% in developmental properties. The prop

Continued on page 36



Wilshire

Continued from page 17

was officials assumed they couldn't get the real estate characteristics they wanted from them for diversification of assets.

But Mr. Torres said a Wilshire study has shown the publicly traded securities had excess return that could only be accounted for if they did have the characteristics of real estate.

Wilshire is pushing the index as a way to make changes in a pension fund's real estate portfolio, something they can't do easily through their commingled fund investments. That's because many open-end funds, which touted liquidity, aren't allowing pension funds to cash out in a reasonable amount of time as was promised.

Some closed-end funds, meanwhile, which were supposed to have a 10-year life, are having trouble selling off properties in order to liquidate.

Without being able to make changes in real estate money managers, their property holdings or the geographic mix in their portfolios, Mr. Torres said, pension fund executives sometimes are locked into relatively poor performing investments.

Some investors say they don't need to make changes because they are investing for the long term. But Mr. Torres said change is needed when the current manager is not doing a good job, or there are changes in trustees, investment strategy or the plan itself.

Mr. Torres contends the underlying problem with commingled real estate funds is they aren't subject to market discipline: They have no repricing mechanism that would give investors liquidity.

Many of the problems with commingled funds can be solved through investment in publicly traded real estate securities, Mr. Torres said.

The market can "squash down" the price of the securities, if needed, so real estate will remain liquid. In turn, pension funds can adjust their portfolios.

By being able to readjust the price, real estate can compete in return with other asset classes, said Mr. Torres.

Paul Saint-Pierre, president of the real estate consulting firm Pension Realty Advisors, San Francisco, said he supports Wilshire's new index and the concept of pension funds investing in publicly traded real estate securities.

But, he said, pension funds are going to have to be willing to pay for analytic research to monitor the operating managers of publicly traded real estate trusts and companies. So far, he said, pension funds haven't shown themselves willing to pay that price.

Investment banking houses attempted in 1986 to generate interest in real estate securities, but the effort largely failed, partly because pension executives didn't realize the problems with privately traded investment vehicles and partly because there was no benchmark for publicly traded real estate securities, he said.

The National Association of Real Estate Investment Trusts already offers an index. But Mr. Torres said the index contains financing vehicles, securities for investment in race tracks and other real estate that often isn't of interest to pension fund investors.

Wilshire, in forming its index, attempted to mimic pension funds' current investments in such properties as warehouses, offices, retail and apartments.

Another problem is the NAREIT Index doesn't include public real estate companies, which comprise 22% of the Wilshire index.

The investment bankers also failed because the prevailing theory has been that there was a significant cost associated with the liquidity of publicly traded real estate securities. But Wilshire has found no such cost exists, said Mr. Torres. For a period from the first quarter of 1978 to the second quarter of 1991, the Wilshire index outperformed the widely recognized Russell-NCREIF Property Index by 455 basis points. The Wilshire index had a compound annual return of 15.15%, vs. 10.6% for the Russell-NCREIF index.

Investors also previously objected to real estate securities, saying they had too much volatility with frequent price changes. But investors have since found that appraised real estate often masked the true price volatility in even privately traded real estate.

The Wilshire index is dominated by investment in retail properties, unlike the domination of office properties in pension fund portfolios and the Russell-NCREIF Index.

But with the market discipline that publicly traded securities offer, pension funds would have shifted significant amounts of their investment into retail years ago because retail has had the best return in the last several years, Mr. Torres said. ■

Continued from page 35

erty mix was 13% industrial; 6% multifamily; 25% office/commercial; 32% retail; and 24% land. The geographic mix was 69% West; 14% Midwest; 14% East; 3% South.

The firm offers an open-end commingled fund and direct, separate accounts.

Wells Fargo Real Estate Equity Fund (REF), an open-end fund, has $137 million in contributions from 100 tax-exempt clients. The fund's investment strategy emphasizes creating value through acquisitions in properties that can be expanded or renovated and selective new property development. The primary investment vehicle is through partnership-oriented transaction structures. Property types include shopping centers, industrial/warehouse properties, apartments and offices. The fund invests nationwide, but most acquisitions are in major growth areas of the West with a particular emphasis in California.

Tax-exempt clients include IBM, GM, Permanente Medical Group and Ohio Public Employees.

The parent company is Wells Fargo Bank.

Doug Hayek is in charge of making property investments; J. Michael Johnson is client contact.

The Yarmouth Group Inc.
Swiss Bank Tower, 10 E. 50th St., New York, N.Y. 10022; (212) 355-4810

	($ millions)
Tax-exempt real estate assets	$4,700
Equity	$4,500
Hybrid debt	$200
Commingled or pooled funds	
Equity	$255
Direct, separate accounts	
Equity	$4,245
Hybrid debt	$200
Total real estate assets	$7,900
Equity	$7,250
Hybrid debt	$650

As of June 30, The Yarmouth Group Inc. had $4.7 billion in U.S. institutional tax-exempt real estate assets, of which $3.35 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $4.1 billion as of June 30. Contributions committed but not received were $400 million.

Of the total assets under management, $3.2 billion was invested for non-U.S. clients, including $750 million for pension funds, $2.45 billion for Japanese clients and $550 million in non-U.S. properties.

Of the U.S. tax-exempt assets, 96% was in existing and 4% in developmental properties. The property mix was 5% hotel/resort; 2% industrial; 53% office/commercial; and 40% retail. The geographic mix was 42% West; 9% Midwest; 38% East; 11% South.

The firm offers separate account management and a closed-end REIT fund.

Tax-exempt clients include RJR Nabisco, IBM, Southern California Edison and New York State & Local.

Evan H. Heller is in charge of making property investments; David R. Hodes is client contact.

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The Exchange of Ideas

Country funds smart for foreign investing

By Albert J. Fredman and George Cole Scott

Closed-end, single-country funds offer plan sponsors an attractive means of entree to about two dozen of the world's stock markets.

Ample evidence from academic studies demonstrates cross-border diversification can improve a portfolio's reward-to-volatility ratio. Correlation coefficients of 0.5 or less between the U.S. stock market and markets of other countries frequently are observed. The correlations with the U.S. market are typically lowest among the emerging markets, which, as a group, offer the best diversification potential.

The closed-end format is ideally suited to investment in foreign equity markets. Many of these markets are volatile, and the individual shares thinly traded. Unlike the open-end, or mutual fund, closed-end fund investors can't redeem shares or force management to dump holdings at distress sale prices, thereby decimating the portfolio. Discounts, produced by investors dumping holdings, are the CEF equivalent to redemptions on open-end funds. Furthermore, the fact the manager works with a relatively stable pool of capital means there is no need for a cash buffer to meet redemptions.

When defined broadly to include multi- as well as single-country portfolios, there are now 45 closed-end country funds listed on U.S. exchanges with more than $5 billion of assets, according to William Dinning, a PaineWebber country fund analyst.

The equities in many non-U.S. markets are difficult to acquire directly. According to Norman Tepper, a closed-end fund analyst at Value Line, some markets — such as Korea, India, Thailand and Taiwan — are closed to foreign investors, while others are difficult to access because of cross-holdings and thin floats. Mr. Tepper expects liquidity will improve in the future as markets open up and as disclosure improves, but for now it's much easier to use a country fund.

As another example, the $165 billion Swiss stock market, made up of more than 220 publicly traded companies, now offers only three American depository receipts, according to Georges de Montebello, president of Helvetia Capital Corp. The Swiss Helvetia Fund holds about 45 companies, most of which would be unreachable by U.S. investors.

CEFs offer investors a unique valuation barometer, the premium/discount level. In the late 1980s, many single-country funds traded at heady premiums to net asset value, commonly ranging from 30% to 100% or more.

Some country funds, however, can be as volatile as over-the-counter growth stocks that trade at outrageous price-earnings ratios.

For example, in the 52-week period ended Aug. 17, 1990, the Spain Fund went from a 145% premium to a 9% discount; the Germany Fund, from a 100% premium to a 15% discount; and the Taiwan Fund, from a 98% premium to a 23% discount, according to data provided by Michael Porter, a Smith Barney country fund analyst.

The accompanying table contains the 52-week high/low, discount/premium levels of several single-country funds during the period ended May 31. An average of weekly discounts/premiums also is reported. (If the fund has

See **Foreign** *on page 38*

Premium-discount analysis of select single-country funds*

Fund	Premium/discount (-) 52-week high	52-week low	52-week average
Austria Fund	5%	-30%	-15%
Italy Fund	1%	-34%	-13%
Turkish Investment Fund	5%	-36%	-17%
India Growth Fund	32%	-31%	- 6%
Japan OTC Equity Fund	48%	-26%	3%
Taiwan Fund	54%	-23%	23%
Brazil Fund	21%	-19%	1%
Emerging Mexico Fund	8%	-20%	-14%
Mexico Equity & Income Fund	4%	-27%	-14%

*As of May 31
Source: Smith Barney Research, New York

Albert J. Fredman is a professor of finance at California State University, Fullerton. George Cole Scott is publisher of "The Scott Letter: Closed-end Fund Report," a monthly newsletter on closed-end funds. Messrs. Fredman and Scott also co-authored "Investing in Closed-End Funds: Finding Value and Building Wealth," New York Institute of Finance/Simon & Schuster, 1991.

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Foreign

Continued from page 37

been in existence for less than 52 weeks, the range reflects its shorter trading life).

In a few cases a modest premium may be justified. The best example would be the Korean stock market, which has been closed to outside investors except through funds investing there such as the Korea Fund, which generally has traded at a premium averaging greater than 50%. The Korean stock market, however, is expected to give foreigners restricted access beginning Jan. 1, and that might explain why the fund has traded at a lower premium recently.

CEFs ordinarily should trade at some discount because investors face the risk of share prices that fluctuate more widely than net asset values. Valuations change rapidly with changes in investor sentiment, which is largely unpredictable. During market sell-offs you often see a "domino effect" as observed in the summer of 1990, when discounts on many country funds were driven to bargain-basement levels.

Primary country fund selection guidelines are as follows:

- For the most complete diversification in a global sense, include CEFs representing each of the major sectors of the non-U.S. world market portfolio: Europe; Asia and the Pacific Rim; and Latin America.
- Consider the correlations of returns between the U.S. stock market and the individual foreign markets. The lower the correlation, the better the diversification.
- Look for value in terms of the p/e ratio of the target market and the discount of the CEF.
- Examine the performance of the CEF relative to its benchmark index. Try to buy good performance at a discount.

The most basic way to represent the diversification benefits of multicountry investing is to analyze the correlation of price movements between the U.S. market and different foreign markets. Usually, correlations of returns between pairs of stock markets are positive during periods of five or more years. The lower the value the better, from a risk-reduction standpoint. We must examine the correlation issue in more detail, however, because of the CEFs' inherent complexity.

PaineWebber's Mr. Dinning has done an analysis of diversification in terms of correlation. He examined a number of correlations including those between:

- the target market and the U.S. market;
- the net asset value of the fund and its target market;
- the net asset value of the fund and the U.S. market; and
- the net asset value of the fund and its share price.

Emerging markets generally had the lowest correlations to the U.S. market. The best diversification provided by developed markets was offered by Austria, Italy and Germany. Mr. Dinning also found there is generally a very high correlation between the fund's net asset value and its target market index. One always should examine the cash position of the fund. As the cash position increases, the correlation of the net asset value with the target market's index would be expected to decline.

A CEF whose net asset value exhibits a high correlation with its target market but has low correlation to the U.S. market offers the best diversification.

The relationship between the net asset value of a fund and its share price is very important. We already have seen discounts and premiums are subject to wide fluctuations. Thus, we know intuitively the relationship between net asset value and price would not be that close. The fund's share price, however, must have at least a fair degree of correlation to its net asset value in order to make meaningful inferences about its diversification potential.

Mr. Dinning correlated fund prices with target market indexes and the U.S. stock market. He concluded the price of a country fund generally is tied more closely to its host market than to the U.S. market, but the fund's net asset value has a stronger correlation to its market than does its share price.

Looking at diversification in relation to stock price rather than net asset value, the share prices of several funds were found to have above-average correlation with their target markets while their markets exhibit below-average correlation with the U.S. market. All except one also exhibited high net asset value correlation with their markets. The funds common to both groups may appear to offer the best diversification potential. Of course, correlations do vary over time as do the conclusions drawn from such studies. Nonetheless, this approach offers useful input in the CEF selection process.

In selecting country funds, weight should be given to discounts as well as correlations. One should look for bargains among markets at low valuation multiples with funds trading at attractive discounts.

The best way to minimize the risk of CEF investing is to buy funds trading at near historically wide discount levels and, if possible, those relatively wider than those of their peers. It has been observed the original CEF targeting a country tends to maintain a higher valuation than subsequent funds launched to invest in the same market.

Naturally, there are different ways to structure a global portfolio. For instance, one could invest in a fund investing in dozens of emerging markets, as opposed to investing directly in a dozen or more single-country funds investing in emerging markets. Or one could invest in a fund focusing on regional markets.

Where there are other ways to gain exposure to certain markets through CEFs, one should compare the discounts on the different funds as a part of the decision-making process.

But, don't look at the discount in isolation. There is always a reason for a discount. The really deep ones often result from poor performance, high political or economic risk, highly illiquid markets or an illiquid fund. Buying at a deep discount, while it could lead to superior results, is not a substitute for doing the necessary homework.

Here are some additional selection guidelines.

- Determine to what extent, if any, the fund management hedges against currency fluctuations. Hedging doesn't always work that well because the timing of the hedge could be off.
- Examine the liquidity of the country fund by looking at its average daily share volume. There can be wide variation among CEFs in terms of their liquidity. Make sure the funds in which you are interested offer enough liquidity for your purposes. ■

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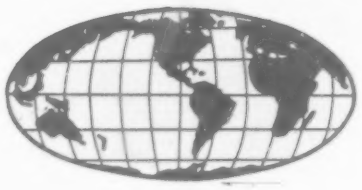

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AT DEADLINE

British fund assets tapped

As a result of recent changes in U.K. pension legislation, Cincinnati Milacron, a producer of machine tools and plastics machinery, plans to withdraw approximately $10 million in surplus assets from the pension fund of its British subsidiary. The move will result in a $4 million tax expense in the third quarter. The company did not disclose how it will use the surplus.

2 funds select executives

Karen L. Kellerman has been hired as investment officer for the $1.4 billion North Dakota State Investment Board, replacing Leroy Gilbertson, who left last January. Ms. Kellerman, a financial analyst with Chevron, will assume the post in November.

Doug McCalla has assumed the job of investment officer for the $900 million San Diego City Employees' Retirement System, a new position. He previously was a retirement system board member and city revenue analyst.

Financing booms in '91

Financing volume in the first three quarters of 1991 exploded 61% to $384.3 billion from the 1990 period's $238.1 billion, mostly because of investment-grade debt issuance, according to preliminary figures from IDD Information Services. New investment-grade issues rose to $329 billion so far this year, from $213 billion in the first three quarters of 1990.

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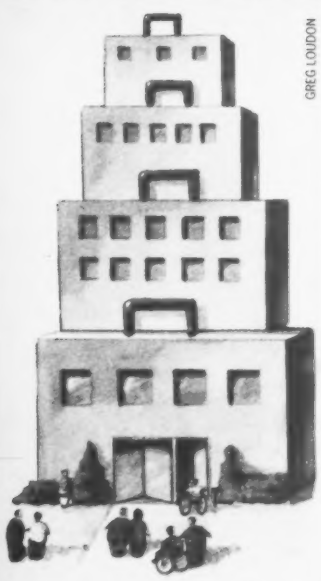
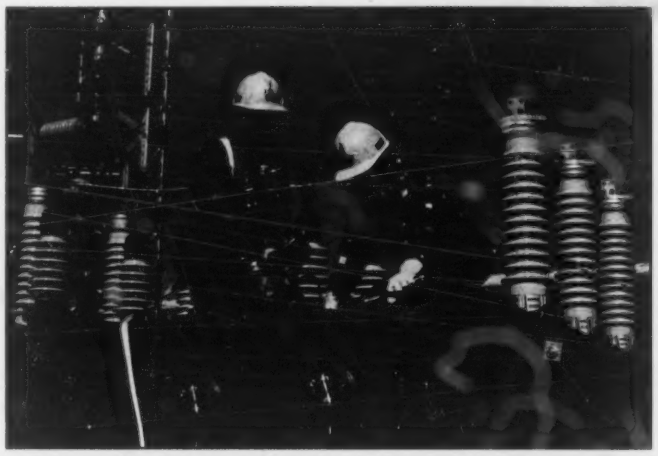
INSIDE



GREG LOUDON

Law could hit buildings

Institutional real estate investors might be the first to feel the pinch of new legislation that could adversely affect the value of properties that do not reflect the needs of people with disabilities. In Commentary, Page 14.



Rochester Gas & Electric's $125 million in fixed income should generate enough cash flow to pay benefits for the next seven years.

Benefit payouts key to allocation strategy

By Anne Schwimmer

ROCHESTER, N.Y. — Rochester Gas & Electric Corp. has altered the way it makes its asset allocation decisions in hopes the company no longer will have to contribute to the now-fully funded $410 million pension fund.

The fund committed $125 million to high-quality, fixed-income investments whose cash flow should pay benefits for the next seven years.

Such a move gives "some confidence that there is proper liquidity in the portfolio," said Sean Higman, director of trust asset management at Rochester G&E.

The commitment to bonds remains unchanged. "The only subtle difference is how we determine how much we have over there," Mr. Higman said. "For the first time, (managers) are going to have to give us a regular cash flow," with yields and maturing bonds meeting payment needs.

"Before, when we needed (money), we would take it on an ad hoc basis."

Fund officials and consultant Rogers, Casey & Associates, Darien, Conn., calculated the dollar amount of benefit payments that will be drawn down on the fund over the next seven years, then set aside $125 million to invest in fixed income to meet the benefit payments.

The remainder of assets will be invested in a broad equities cate-

See **Utility** *on page 31*

Adapting to change

Firms use invention to catch 401(k) dollars

By Curtis Vosti

More and more banks and independent money managers are finding innovative ways to compete with mutual fund companies in tapping the 401(k) market.

Whether by developing communication products, offering administrative and record-keeping services or modifying investment approaches, the changes all are in response to a fundamental change in the growth of investible assets. Defined benefit plans — once the bread and butter of these money management operations — aren't growing, and defined contribution plans are.

Sometimes, however, the moves can backfire.

In September, INVESCO MIM Inc. lost its management of $800 million of the $3.2 billion Windsor II mutual fund, sponsored by The Vanguard Group of Investment Cos., Valley Forge, Pa.

Brian Mattes, a vice president at Vanguard, said the mutually agreed-upon split was based on a perception that INVESCO's separate mutual fund operations could offer a fund that would compete directly with Windsor.

An INVESCO spokesman declined to return phone calls. In 1989, the firm had moved heavily into competition for 401(k) dollars, purchasing the Financial Funds Group of Denver, which now has almost $4 billion under management.

Two years ago, the firm launched INVESCO Solutions, a turnkey record-keeping, administration and communication service in Louisville, Ky., meshed with its investment management

See **401(k)** *on page 35*

IRS opens door to swap market

Proposal would exempt deals from tax

By Joel Chernoff

WASHINGTON — The Internal Revenue Service has opened the door to investments by tax-exempt institutions in the nearly $3 trillion swap market.

A proposed rule issued by the IRS is expected to wash away any fears that pension funds and other tax-exempt institutions would incur unrelated business taxable income from engaging in swaps. The IRS specifically would exempt currency and interest-rate swaps from taxation as of Aug. 30, 1991, while other, newer products would have to receive individual governmental approval.

The proposal is expected to launch a wave of marketing efforts to tax-exempt funds, whose more than $3 trillion in assets could make them a significant force in the swap market. Leading U.S. swap dealers include Morgan Guaranty Trust Co. of New York, Security Pacific National Bank, AIG Financial Products and Merrill Lynch & Co. Swiss and Japanese banks also are expected to market to U.S. funds.

The question of being taxed has discouraged most tax-exempt institutions from entering the growing swap market. Only a few tax-exempt institutions, notably the Harvard University endowment fund and the Teachers Insurance and Annuity Association — College Retirement Equities Fund, have entered the market.

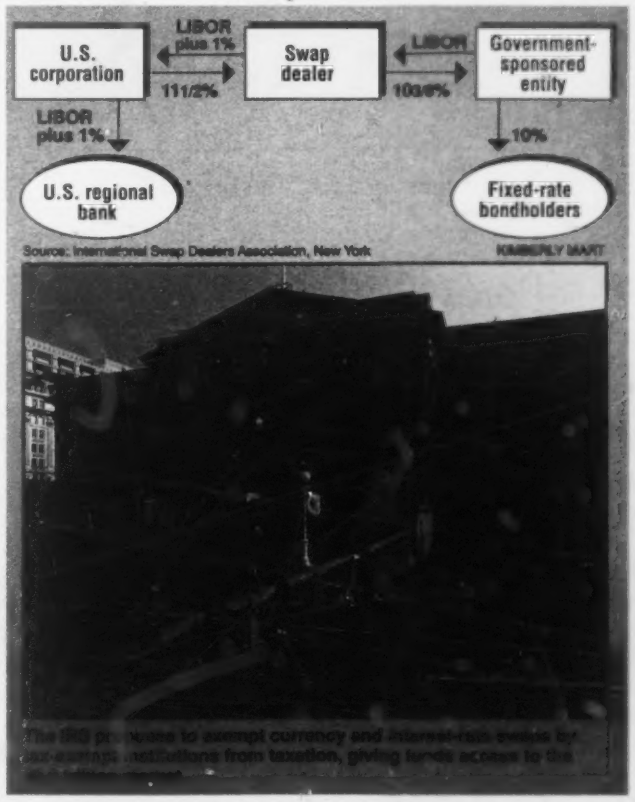
Experts welcomed the IRS guidance. "We think it's the right result, that these are appropriate investments that should be permitted without incurring tax," said Peter Clapman, senior vice president and chief counsel, investments for TIAA-CREF.

"For the last 10 years, pension funds and tax-exempts have sort of been playing with one hand tied behind their back," said Richard Leibovitch, vice president, global swaps and derivatives,

See **Swaps** *on page 32*

An interest-rate swap

The advantage to the corporation is that it achieves funding at a fixed dollar rate that is lower than the cost of a fixed-rate issue. The advantage to the government-sponsored entity is it achieves funding at a lower floating rate cost than would be available with a floating-rate note.



NEWS DIGEST

DAVID LAWRENCE

Steak & Ale's parent, S&A Restaurant Corp., recently turned to the private market to place $200 million in senior and subordinated debt with international investors. Page 6.

Business groups and executives came out strong in their opposition to the Securities and Exchange Commission's proposed changes to the proxy process. Page 4.

Standard & Poor's Corp.'s unveiling of its MidCap 400 has changed the agency from market measurer to marketer of investment vehicles. In Opinion, Page 13.

PIC Europe has found a lucrative line of business: arranging private deals between European firms and U.S. investors. Page 20.

The combination of two models — one based on growth, the other on value — creates an investment tool that gleans the best of both styles. Page 21.

Soft-dollar allocations increased 37% in 1990, continuing an upward trend, a recent survey shows. Page 26.

RCB Trust selected three managers for its minority trust while some question the criteria used for inclusion in such funds. Page 28.

SPECIAL REPORT: LARGEST NON-U.S. MANAGERS

***Pensions & Investments'* foreign adviser** survey shows the Top 10 controlled more than 28% of the total assets run by the 100 biggest firms. Page 17.

FINANCING

The $3 trillion swaps market could get a boost from an IRS proposal that would lead to more participation from tax-exempt institutions. Page 1.

INTERNATIONAL

British Rail Pension Trustee Co. is among the U.K. investors considering a more active approach to corporate governance issues. Page 3.

REAL ESTATE

Property buyers and sellers remain far apart in their expectations, leading to a substantial decrease in the dollar volume of transactions. Page 8.

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Payments to broker probed

Massachusetts bars 2 firms from new state business

By Terry Williams

BOSTON — Aetna Life & Casualty Co. and Massachusetts Financial Services have been prevented from taking on new public pension fund business in Massachusetts pending the outcome of a state regulatory agency inquiry into the business practices of the two firms.

But the "cease and desist order" barring MFS is under immediate review, said John J. McGlynn, commissioner of the Public Employee Retirement Administration, which regulates state funds.

Mr. McGlynn wouldn't explain why the PERA took action against Mass Financial, and he wouldn't discuss the Aetna case.

Aetna officials have admitted to Massachusetts public pension fund clients they had a contract with stockbroker Carmine Elio to pay Mr. Elio a commission for bringing the company pension fund business. Mr. Elio formerly was chairman of the Massachusetts Retirement Law Commission, which had pushed for fuller funding for public pension funds.

Mr. Elio, however, did not disclose the financial arrangement to the pension funds, according to Joseph E. Connarton, chairman of the retirement board for the $119 million Cambridge (Mass.) Retirement System.

As a result of the disclosure, the Cambridge system last week terminated its relationship with Aetna, Mr. Connarton said. Aetna managed $19 million in equities, real estate and fixed income for Cambridge.

"That is a breach of the public trust, and that's why we moved as quickly as we did," said Mr. Connarton.

The $22 million Beverly Contributory Retirement System is awaiting an opinion from its city solicitor on whether to pursue legal action against Aetna, one of its managers, according to Ruth Morgan, executive secretary.

Aetna, however, has proposed a settlement in which it would pay Beverly the commissions the insurer paid to Mr. Elio.

"We wouldn't have done this (invest with Aetna) if we knew," said Ms. Morgan. "We were one shocked group of people" when Aetna officials informed the board of the secret contract, Ms. Morgan said.

Massachusetts Attorney General Scott Harshbarger has so far held two meetings, one "with agencies that may be relevant as far as their jurisdictional responsibilities," and one with the legal counsel of the local retirement boards that are clients of Aetna, said Thomas Samoluk, a spokesman for Mr. Harshbarger.

Mr. Samoluk said he couldn't

See **Payments** *on page 31*

PBGC faces financial disaster

LTV ruling sparks emergency efforts

By Joel Chernoff

WASHINGTON — A damaging court ruling in The LTV Corp.'s bankruptcy proceeding could cause the PBGC's premiums to double or worse, the agency's executive director said.

To avert a financial disaster, the Pension Benefit Guaranty Corp. is drafting emergency legislation that would force LTV to continue funding its nearly depleted Jones & Laughlin Hourly Pension Plan, readying broader legislation to improve the PBGC's status in bankruptcy proceedings and appealing the court decision.

But the impact of the decision could be severe. "If allowed to stand, it will encourage other companies to enter bankruptcy and stop funding their pension plans," James Lockhart, the PBGC's executive director, told the National Employee Benefit Institute.

Under the PBGC's baseline scenario, the agency's projected deficit would increase to $5.5 billion instead of $2.1 billion by 2000 when the effects of the LTV ruling are taken into account. And if companies dump more underfunded plans on the agency, the baseline scenario could jump to $10 billion in nine years, Mr. Lockhart said.

Under the agency's pessimistic scenario, the agency's deficit would soar to $16 billion instead of the currently projected $11.4 billion. The agency's current deficit is about $2 billion.

"A doubling (of the single-employer plan premium) and well above that is foreseeable if we cannot get the kind of fixes we are looking for," Mr. Lockhart said.

The current base premium for single-employer plans is $18 per participant. Employers with underfunded plans pay a surcharge of up to $54 per participant.

The Sept. 13 ruling by U.S. District Court Judge Kevin Duffy said the PBGC is not entitled to preferential treatment as a creditor in LTV's bankruptcy proceedings. That ruling threw out the PBGC's claims that four missed contributions and its claim for 30% of LTV's net worth are entitled to priority status.

Instead, Judge Duffy lumped the PBGC in with LTV's other unsecured creditors. The effect could be to reduce the PBGC's recovery from close to 100 cents on the dollar in cash to between 10 cents and 15 cents on the dollar in LTV stock. About $6 billion in claims are pending against LTV.

"Without priority claims, PBGC could lose nearly $2 billion in the LTV case alone from the combination of the J&L Plan and the Republic Salaried Plan," which was terminated in 1986, the agency said.

The court also ruled the bankruptcy court, not the PBGC, can set the interest rate to value the pension liability. The bankruptcy court had set the interest rate at 11.5%; the PBGC had picked 7.5%. The higher interest rate lowered the PBGC's claims by 40%, Mr. Lockhart said.

In addition, the judge held the Department of Labor could not force the Dallas-based steelmaker

See **LTV** *on page 35*

Suits on Kansas losses to grow

By Curtis Vosti

TOPEKA, Kan. — The fireworks are continuing for the $4.4 billion Kansas Public Employees Retirement System as it seeks to untangle the mess surrounding its troubled direct investment portfolios.

In the coming weeks, the system is expected to add to its lawsuit against those it holds responsible for more than $200 million in direct placement losses. Possible cases against more than 100 defendants have been investigated, according to Leonard Ring, a Chicago attorney the board hired in June to pursue civil litigation.

The expected additional lawsuits come on the heels of a flurry of activity in connection with the board's Sept. 13 meeting related to the controversial direct placement investments, begun in 1985.

In the spring, the board fired its two direct placement managers as a joint committee of the Kansas Legislature heard allegations of duplicity, fraud and losses in connection with the direct placement programs.

The potential losses are estimated to have grown from $60 million to $100 million and now, more than $200 million.

The controversy led to the resignation of the fund's executive director and the creation of the position of investment officer, and an initial suit against one of the direct placement managers, Reimer & Koger, Shawnee Mission.

At the Sept. 13 meeting, the board accepted the resignation of Callan Associates Inc., its consultant for 15 years, and began the process of hiring a new one; voted 4-2 to fire Peters, Gamm West & Vincent Inc., Wichita, from its management of a $444 million fixed-income portfolio; and heard a report from its direct placement workout manager, Pacholder Associates Inc., that recommended the board set aside an additional $121 million to cover potential losses in the portfolios.

The board earlier had written off $109 million in losses from the portfolios in which it had invested $468 million in venture capital opportunities in Kansas and Missouri. The losses included a total writeoff of a $65 million investment in the failed Home Savings Association of Kansas City, Mo.

That loss prompted legislative hearings, an FBI investigation

See **Kansas** *on page 33*

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S&A latest to turn to private financing

By Anne Schwimmer

DALLAS — S&A Restaurant Corp., owner of Bennigan's and Steak & Ale restaurants, placed $200 million in senior and subordinated debt with international institutions.

The deal is another example of a leveraged company turning to institutions for both senior and subordinated financing rather than for subordinated financing alone. Highly leveraged Del Monte Corp. also did a senior financing with institutions rather than banks (*Pensions & Investments*, Sept. 16).

Some predict leveraged companies like S&A and Del Monte increasingly will turn to institutions in the private market for affordable senior financing rather than rely solely on commercial banks, which are under regulatory pressure to decrease their risky holdings.

"Borrowers are looking to the private placement market . . . rather than to banks," said Robert Svehlak, chief financial officer of Steak & Ale.

"Banks are so restricted with all the HLT restrictions and regulatory requirements. I think the state of the banking industry . . . is creating an opportunity for the private placement market," he said.

Mr. Svehlak said that major investor Nippon Credit Corp. is acting as quasi-trustee and agent for two of the tranches. That encouraged other Japanese banks and leasing companies to step up for a piece of that debt. These investors purchased $105 million.

Other major investors SunAmerica Investments Inc., Los Angeles, and Carl Lindner's American Financial Corp., Cincinnati.

Bennigan's and Steak & Ale were bought out by Metromedia Co. for an undisclosed amount in July 1989. Metromedia, which controls 90% of the holding company, S&A Restaurants, is the investment vehicle of financier John Kluge.

The private deal refinanced a $105 million bridge loan that backed the buy-out and a $30 million term loan that had been led by Chemical Bank, said Kenneth Moelis, managing director at Donaldson, Lufkin & Jenrette Securities Corp., New York, adviser to S&A Restaurants.

In an unusual twist, the remaining $65 million was lent to Metromedia, which will use $38 million of it to buy zero-coupon U.S. Treasury securities for a trust fund that will secure the $66 million seven-year subordinated notes portion of S&A's financing. The zero-coupon Treasuries will accrete to $66 million, Mr. Moelis explained. The remainder will be used for fees and other purposes.

Thanks to the securitization of the subordinated debt, both the senior and subordinated portions of the S&A deal were rated BBB by Duff & Phelps Credit Rating Co. and 2 by the National Association of Insurance Commissioners.

The subordinated tranche — priced to yield 11.15% — was secured by zero-coupon U.S. Treasury securities so Metromedia did not have to give up equity in the company to get the deal done. Private placement buyers typically require an equity kicker with riskier subordinated debt, but Metromedia doesn't like to "give away equity," Mr. Svehlak said. ■

Northern Trust has long been recognized for leadership in developing the most flexible information delivery systems in global custody. Whether it's being at the forefront in offering on-line real-time systems or designing the most comprehensive analytical tools in the industry, continuous technological innovation has been our hallmark. And that makes the difference between performance that meets expectations—and performance that excels.

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Northern Trust Global Custody

CORRECTIONS & CLARIFICATIONS

• **Dusco Inc.** was omitted from the Sept. 16 ranking of real estate investment advisers. Dusco has $134 million in tax-exempt assets under management, all in equity real estate. Dusco would have ranked 65th on the list.

MONEY MANAGERS

WPG hopes Eden purchase is genesis of good things

Eden Financial execs (clockwise from top left) Gary Scheier, Donald Reid, Bernard Tew and Joe Pappo have joined the team at Weiss, Peck & Greer.

■ Weiss, Peck & Greer soon will begin offering a quantitative equity product to complement the firm's quantitative, constant-duration fixed-income strategy.

The New York-based investment firm, with $8.7 billion under management, has acquired Chicago's Eden Financial Corp. Eden specializes in portfolio variance reduction techniques. Terms of the deal were not disclosed.

The first quantitative equity product offered by WPG will be an optimized version of the Standard & Poor's 500 Stock Index.

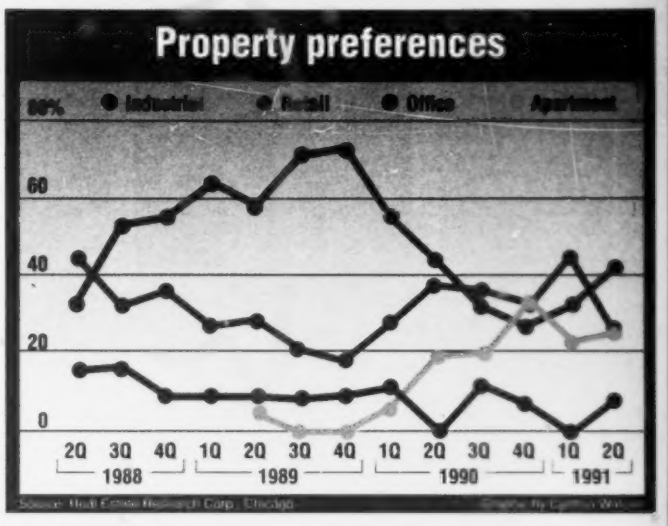
The product limits a stock's weighting to no more than times its index weight. A backtest of that strategy for the 10-year period ended Dec. 31 showed it outperformed the index by 457 basis points annually with 6% less risk per year before transaction costs.

"We feel this is an important product for the '90s," said Joseph N. Pappo, formerly Eden's president and now managing director of WPG's quantitative equity division. "As a start-up company, it would have taken time to establish ourselves, and this is an opportunity to accelerate the marketing process."

"We're excited to be joining Weiss, Peck & Greer, which gives us the opportunity to introduce our product to a wider segment of the industry," added Gary E. Scheier, who had been vice president of Eden and now will be senior portfolio manager in the quantitative equity division.

Also joining Weiss, Peck & Greer are Donald W. Reid and Bernard V. Tew, who were co-directors of research and development at Eden Financial. They will hold the same positions in WPG's quantitative equity division.

— Chuck Paustian



REAL ESTATE

Investors can't find right numbers

■ Targeted real estate yields aren't achievable these days, and that's why few property transactions have occurred so far in 1991, a survey suggests.

The survey — by Real Estate Research Corp., Chicago — shows yield expectations continued to rise in the second quarter, while the dollar volume of deals was as much as 50% behind the midyear goals set at the start of 1991.

"Bid/ask spreads remain too far apart to generate transactions," the RERC survey report said. "Most participants have debt and equity capital to place, but they can't find quality product at the right price."

Not surprisingly, the highest yields are sought on central business district offices and neighborhood/community retail properties, while the lowest yields are expected on regional malls.

In other results, RERC found 42% of investors surveyed prefer industrial property — the first time in a year that industrial has topped the list. After leading for three quarters, retail dropped to a second-place tie with apartments. Retail is preferred by 25% of respondents, down from 45%. Offices continued to be conspicuously absent from the list of favored acquisition types.

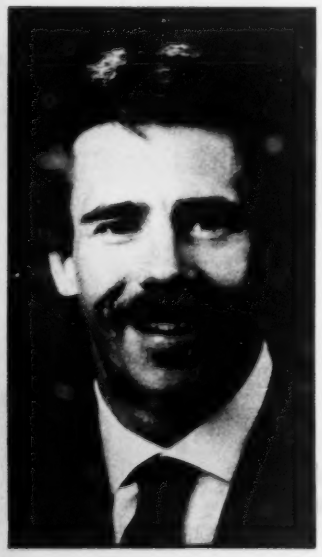
Selectivity, not geography, dictates acquisitions nowadays, respondents reported. Still, they leaned toward the East and West coasts, including Seattle; Portland, Ore.; San Francisco; Sacramento, Calif.; and Orlando and Tampa, Fla.

— Nancy K. Webman

VENTURE CAPITAL

Manager set to try new approach

■ The venture capital shakeout has left the industry stalled, but a Michigan venture capital manager is putting together a program he believes will be the model for the 1990s.



Tom Nastas has received some interest in his royalty approach to venture capital.

Tom D. Nastas, president of Innovative Ventures Inc., East Lansing, Mich., is taking a different approach to venture capital investing by using a royalty structure rather than the traditional venture capital equity approach. The royalty approach, he said, generates liquidity and returns independent of the exit market once a venture company becomes successful.

"Rather than rate of return and liquidity being tied to the exit market, we will tie it to sales; as long as there are sales we have a rate of return," Mr. Nastas said. "In the past, about 99% of venture capital investments were done on an equity basis, but you can't predict how well a company will do in the future; when you do an equity deal you presume growth."

Structuring the investments on a royalty basis exploits that "inefficiency and generates almost immediate income streams," said Mr. Nastas, rather than waiting for the traditional five- to seven-year "promised land."

His firm is considering a venture fund later this year using the royalty approach but, he said, the concept already has garnered attention from foreign officials interested in attracting capital to help rebuild central European economies.

— Fred Williams

INTERNATIONAL

Additions likely for benchmark

■ If John Conlin is right, the EAFE index soon will need a new name.

Mr. Conlin, marketing director of SBC Portfolio Management International Inc., New York, is among many international investment professionals predicting several countries outside Europe, Australia and the Far East will be added to the world stock market index in the next 10 years. (EAFE is the acronym for the Morgan Stanley Capital International Europe Australia Far East Index).

In three years, he says, eight countries are likely to join — Greece, Ireland, Luxembourg, Mexico, Portugal, South Africa, Thailand and Turkey.

In five years, Chile, Hungary, Indonesia, the Philippines, South Korea and Taiwan could be added. Hungary will be the first Eastern European country to make the grade because it's "so far ahead" of other countries in that region, Mr. Conlin said during a speech at Continental Bank's third annual employee benefits conference earlier this month in Chicago. Ten years from now, SBC predicts, Argentina, Brazil, China, Czechoslovakia, Egypt, India, Poland, Russia, the Ukraine and Venezuela will join.

— Nancy K. Webman

WASHINGTON

Black cat crosses the PBGC's path

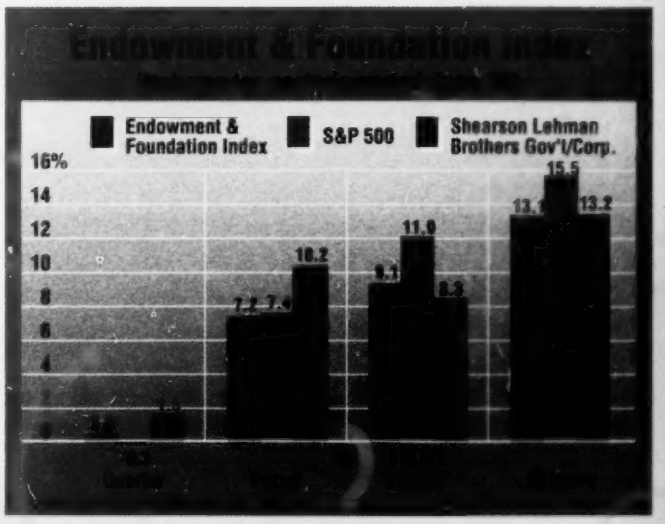
■ Friday the 13th turned out to be doubly unlucky for the Pension Benefit Guaranty Corp.

First, the power was off in the agency's K Street offices — affecting lights, elevators and ventilation. Then, at 5 p.m., a U.S. District Court judge dealt the agency a harsh blow in its struggle to get The LTV Corp. to fund its pension plans, ruling the agency would be considered an unsecured creditor in the five-year bankruptcy filing.

As the decision was relayed, Executive Director James B. Lockhart III remained in the sweltering building. "He stayed in the building, as a captain going down with his ship," joked an agency spokeswoman.

There was no relief for PBGC workers, as the building failed to regain its air conditioning during the record-breaking temperatures of the following week.

— Joel Chernoff



FINANCING

Avis enjoying first drive on private placement route

■ Avis Inc., Garden City, N.Y., has raised $50 million in senior debt in its first private placement since it became a private, employee-owned company in 1987.

It placed $50 million in senior notes due 2012 with Prudential Capital Corp., a subsidiary of Prudential Insurance Co. of America, Newark, N.J.

David J. Mryglot, Avis director of finance, said that prior to going private, "we had almost all our funding with banks. This time we decided to put our big toe in a different pool of water and see what happens."

Charles Mather, vice president at Prudential, which was the sole lender, said Avis is a leader in the rental car market and Pru hopes there will be opportunities to provide additional financing in the future.

Mr. Mryglot said tapping the private market "helps us to diversify our funding sources. Whether we'll do more depends on our requirements and what's available."

— Marlene Givant Star

Employee-owned Avis Inc. is cruising along in high gear after placing $50 million in notes with Prudential Capital Corp., a Prudential Insurance Co. subsidiary.

INTERNATIONAL

Paribas consolidates operations

■ Paribas Group has put its institutional and private individual money management activities together under the aegis of Paribas Asset Management, Paris, said Alain Leclair, chairman of Paribas Asset Management.

"You can't afford to have multiple asset management teams" anymore, he said during an interview in New York. "Asset management is becoming an industry. A client of Paribas anywhere in the world must be served according to the best criteria of asset management," he said, explaining the consolidation.

Paribas Asset Management has a strong emphasis on quantitative theory, according to Mr. Leclair, who describes French money managers as natural heirs of French mathematician Rene Descartes.

"For us, quantitative (money management) is science, but it is also pragmatism," he said.

Paribas has recently launched what Mr. Leclair said is the first Japanese quantitative equity fund, based on the Nikkei 225 Index, and is starting efforts to launch similar funds for the U.K., German and French markets.

— Anne Schwimmer

MONEY MANAGERS

Merrill grads open new shop

■ Two former Merrill Lynch & Co. employees have started Woodford Capital Management, a New York-based active equity management firm.

Peggy Woodford Forbes, president and chief investment officer, and Michael E.S. Gayed, director of research, hung the Woodford Capital shingle out in April. They manage $25 million for individual investors.

Ms. Forbes was a senior financial consultant with Merrill Lynch from 1981 to 1990. Mr. Gayed was a senior market analyst from 1983 to 1991.

The firm's research system — Strategic Asset Allocation System — integrates a large number of economic, fundamental and quantitative indicators into a single multidisciplinary model.

Over the course of the business cycle, SAAS generates signals that help forecast the economic outlook. SAAS sets up a comparative valuation screen that is used to structure portfolios and to determine the asset weighting based on that outlook.

— Terry Williams

Peggy Woodford Forbes

CORPORATE GOVERNANCE

ITT revamps compensation program

■ ITT Corp., New York, has been removed from the Target 50 shareholder activism program of United Shareholders of America, Washington.

The removal came after the company's compensation committee recommended that the full ITT board institute a series of changes to the company's executive compensation program.

ITT drew the ire of several institutional investors as well as USA, a group of individual shareholders, for what they said was unjustifiably high compensation levels for top executives.

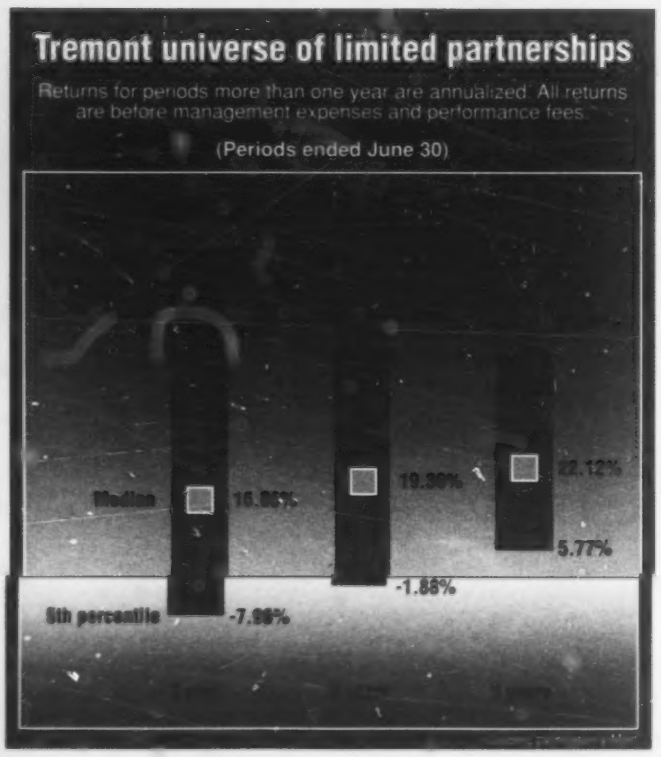
ITT's committee will recommend several changes in the executive incentive plan to more closely link the compensation of top executives with the company's long-term performance for shareholders.

"These planned changes in the company's executive incentive plan will ensure that the irrational compensation received by ITT's chief executive last year will not be repeated," said Ralph Whitworth, USA president.

Rand Araskog, ITT's chief executive, received total compensation estimated at between $7 million and $11.4 million in 1990, representing a 103% increase from the prior year. The company's share value declined 18% during the same period.

ITT also agreed to disclose details of the new compensation program to shareholders in its 1992 proxy statement.

— Marlene Givant Star



BENEFITS

New unit keys on post-retiree health funding

■ Peirce Park Group has launched a special division to assist companies with decisions relating to pre-funding post-retirement medical benefits.

The Wilmington, Del., consultant has developed an asset allocation model to guide companies through the uncertainties of managing looming retiree health liabilities. It also will assist in manager selection and performance evaluation for pre-funding.

Led by companies in regulated industries, the next wave of corporations to pre-fund likely will include firms with collectively bargained post-retirement medical benefits and those that want their employees to save toward the cost of future benefits, said Michael W. Shone, president of Peirce Park Group.

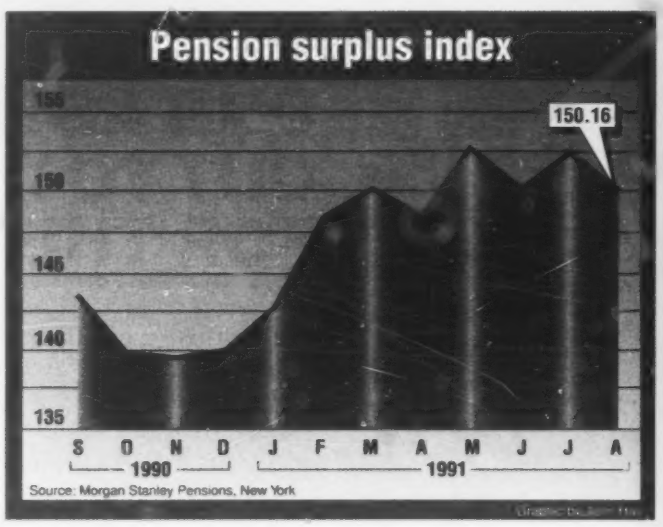
"Once a firm has decided to pre-fund, then they have to make a decision where they're going to allocate those dollars," he said.

The model, the product of four years work, steers companies through the hurdles of managing a liability that is radically different from a pension liability: Not only is the retiree medical liability significantly greater on a percentage basis, but it's also much less predictable, in part because of health care cost inflation.

Peirce Park's new model takes into account whether a company already has selected such funding mechanisms as a 401(h) account or a VEBA and considers variables such as rates of return, a company's medical cost trend rate and current retiree medical expenses.

What emerges is a surplus optimization model, or one that maximizes the growth of assets by allowing for an interactive effect between assets and liabilities. The model takes into account correlations between such macroeconomic influences as medical cost inflation and the Consumer Price Index and also correlates the allocation with a company's work force growth.

— Hilary Durgin



PUBLICATIONS

A Yellow Pages for the distressed

■ The soon-to-be-released National Directory of Corporate Distress Specialists is written proof that there are publications to fit every need imaginable.

The directory, published by Lustig Data Research Inc., Lawrence, N.Y., is the first in-depth guide to firms and professionals providing services in business bankruptcies, loan workouts, turnarounds and the management of high-yield and distressed investments.

The book is intended as a source for institutional investors and corporate distress specialists. Firms can get a free listing in the 1992 edition by contacting the publisher before Nov. 15.

— Marlene Givant Star

Obstacles for property investors and disabled

By Lawrence Nicholson

The Americans with Disabilities Act will have a decided influence on the way many companies do business, as its guidelines become more fully understood regarding applicability of its conditions and circumstances. For commercial real estate, the new law's rules will affect property owners and financiers because of its potential impact on real estate values.

Concern over the value of properties inaccessible to people with disabilities follows the Department of Justice's release in July of the act's final guidelines. The law will affect all existing public access facilities (e.g., restaurants, lodging concerns, entertainment facilities, office buildings, service establishments).

Pension funds and institutional investors are most likely to feel the law's impact first. Due to the vagueness of some of the act's rules, costly court battles appear imminent. Often referred to as having "deep pockets," these investors may be some of the first hit with lawsuits filed by those who do not believe that efforts are being made in accordance with the act's guidelines. The ambiguity of the law arises from some of its generalities, such as:

. What exactly is involved in full compliance? Who is exempt from complying? Who is responsible for compliance?

Owners have little time to contemplate what the conditions mean to them and to their properties before action is required. Provisions of the law state that owners must remove architectural and communication barriers by Jan. 26, 1992, if such removal is "readily achievable." Any additions or renovations to existing buildings completed after the same date also must meet the law's guidelines. What remains unclear is the interpretation of "readily achievable" and the consequences, if any, of compliance preparations that are incomplete as of the January deadline.

In terms of commercial property value, a primary factor will be the cost associated with renovating existing facilities to comply with the act. Exactly who is responsible for the cost of compliance is, as yet, undefined. If property owners are responsible, the costs incurred will be capital expenditures. Added to a building's existing capital expenditures, these additional costs will have a significant impact on the cash flow, and hence the value of a property.

Some real estate professionals believe these capital expenditures could be passed on to tenants as a reimbursable expense. Yet, this position raises a number of questions considering today's "tenant's market." For example, if tenants are to pay a prorata share of the cost of compliance, will the costs deter prospective tenants from leasing space in inaccessible building? Will the compliance issue become yet another factor in the battle over tenants?

Compliance could be "built in" to reimbursable operating expenses to be passed through to the tenants. This wouldn't prevent a negative impact on property values. Most office leases negotiated in today's market included a base year expense stop, a clause that limits a landlord's expense obligation because the lessee assumes expenses above an established level.

This expense stop is, in some cases, based on actual experience of the property, but in many cases it is market-driven. That is, in a competitive environment, the landlord will restructure leases with a higher expense stop or lower expense stop, depending on the demand. Competitive buildings have almost equivalent expense stops. Therefore, if one building's expenses inordinately rise beyond the stops as a result of compliance costs, the building's value will suffer.

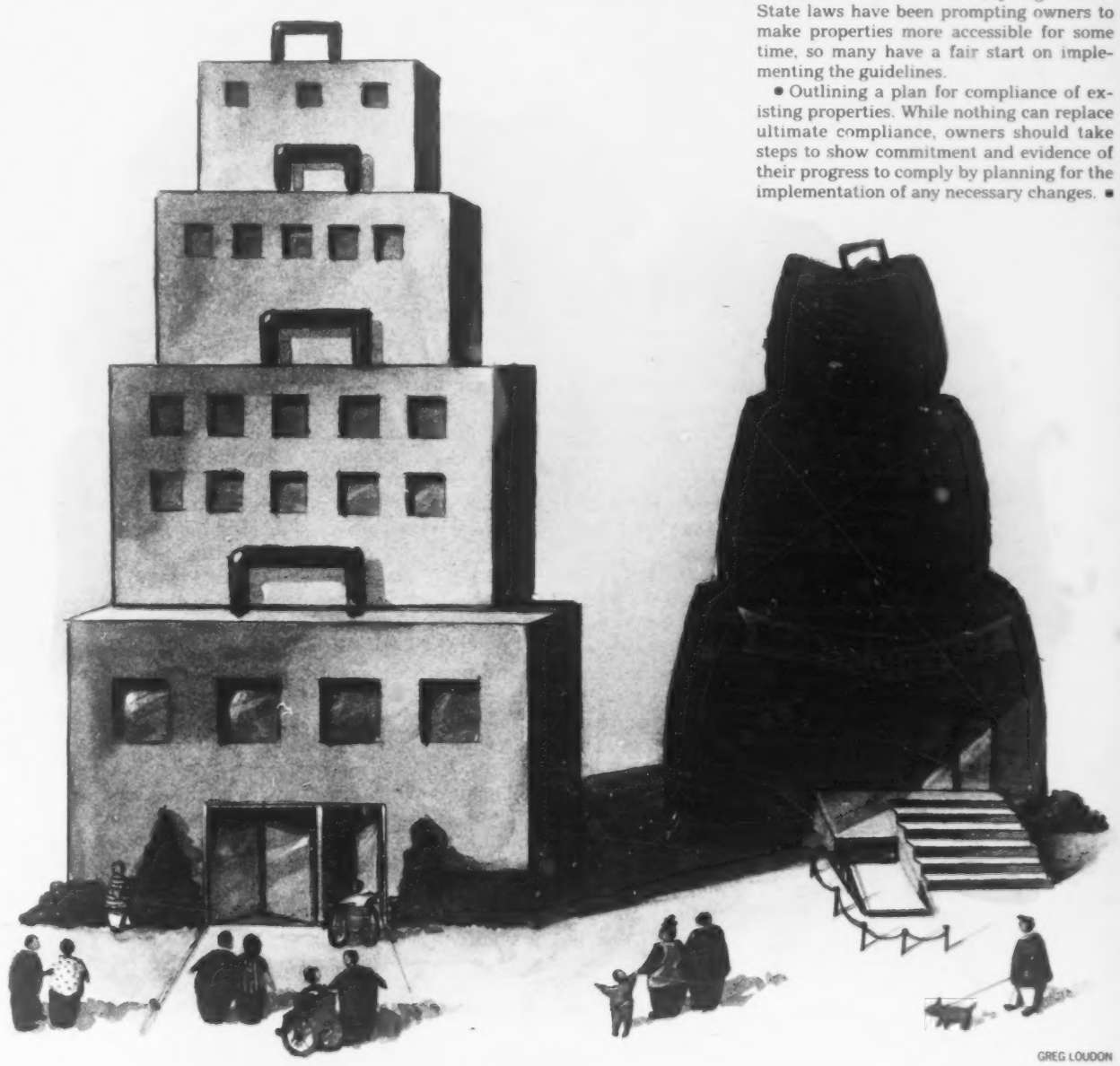
For example, assume Property A is in compliance with the disabilities act and Property B is not. Tenants trying to reduce actual occupancy cost would naturally locate in Property A. The result: lower occupancy in Property B and, thus, a reduction in the value of the property.

The act's guidelines are structured to ensure that future renovation or remodeling plans are made to comply. As of Jan. 26, 1993, new construction of commercial properties must be designed to meet the the act's requirements. In the meantime, the issue is how to best adhere to the ADA's guidelines in the time frame allocated and with those resources available.

Real estate investors can begin protecting their investment now by following a few logical steps. Specifically, by:

- Educating themselves about the act. There is no current data providing information regarding how many properties may already adhere to the act and what actions each requires to bring it within compliance levels. An understanding of the act's provisions is the first step to determining the extent of what action, if any, is necessary.
- Examining their current and future real estate investments against the known rules for compliance. Typical areas needing adaptation include rest rooms, elevators, stairways, doorways, drinking fountains and common areas. Many developers or owners are better off than they might think. State laws have been prompting owners to make properties more accessible for some time, so many have a fair start on implementing the guidelines.
- Outlining a plan for compliance of existing properties. While nothing can replace ultimate compliance, owners should take steps to show commitment and evidence of their progress to comply by planning for the implementation of any necessary changes. ■

Lawrence Nicholson is vice president and managing director-real estate advisory group of American Appraisal Associates, Milwaukee.



GREG LOUDON

LETTERS TO THE EDITOR

Ins and outs of firm's assets

■ Please note the figures Capital Research and Management Co. provided for the May 20 directory of managers erroneously included assets held in individual retirement accounts and individual 403(b) custodial accounts, but excluded endowment and foundation accounts.

Here are the corrected figures: As of Jan. 1, total assets managed, all of which were discretionary, was $37.831 billion. Total tax-exempt assets managed were $4.655 billion. Of that, $4.2 billion was in qualified retirement plans and $455 million was managed in endowment and foundation accounts. The latter represents data on accounts of more than $500,000 only.

Victor S. Sidhu
Senior vice president-client service division
Capital Research and Management Co.
Los Angeles

First int'l equity index fund

■ We were chagrined because Mellon Capital Management wasn't included in the June 24 listing of international managers.

The principals of Mellon Capital introduced the first international equity index fund in 1981. At Mellon Capital we began managing international index funds in 1987. In 1989 we introduced tactical asset allocation to international equity investing. In 1990 we extended it to global investing. As of March 31, we managed $513 million of assets with an international mandate.

Cary Martin Zellerbach
Executive vice president
Mellon Capital Management Corp.
San Francisco

Global manager since 1986

■ We were left out of your June 24 international manager directory. Loomis, Sayles has been managing global bond accounts since year-end 1986 and recently established an international equity group.

As of March 31 total assets managed were $23.198 billion; *total discretionary U.S.* tax-exempt assets, $16.83 billion; and active global bond accounts, $248 million. We had 484 U.S. tax-exempt clients, of which nine are global bond clients.

Ralph D. Sinsheimer
Vice president
Marketing & strategic planning
Loomis, Sayles & Co. Inc.
Boston

Managing foreign assets: The top 100

The 100 largest non-U.S. money managers handle $4.66 trillion in total assets, $1.317 trillion of which is controlled by the Top 10.

Foreign investments by the 100 account for at least 8.8% of their total assets. Among the Top 10, foreign investments account for at least 5.2% of total assets. Not all companies revealed how or where their assets were invested.

The Top 10 placed their foreign assets around the globe, with Japan, the United States, France, Germany and the United Kingdom showing up most frequently in their allocations.

The Top 10 managers, whose profiles start on this page, come from only three countries: Japan, accounting for six of the Top 10; Switzerland, accounting for three; and the United Kingdom, with one.

Those three countries also account for most of the firms among the 100 largest, with 31 Japanese firms, 22 U.K. firms and 12 Swiss firms identified. Also represented were France, with 11 companies; Germany, with seven; Canada, with five; the Netherlands, with four; Australia and Sweden, two each; and Denmark and Liechtenstein, with one firm each.

The statistics in the listing of the Top 100 were obtained from InterSec Corp., Stamford, Conn., with assistance from Euromoney. The information in the profiles was obtained by *Pensions & Investments* from questionnaires sent to the companies and other sources. The profiles were written by *P&I* reporter Anne Schwimmer.

Credit Suisse

ZURICH, Switzerland — Credit Suisse, with $140 billion, does not release information on its total assets.

Information is available, however, on the bank's asset management subsidiary, Credit Suisse Asset Management.

Credit Suisse Asset Management's primary clients are institutions. Assets under management are 37% from mutual funds, 33% from pension funds, 27% from corporations and 3% from private individuals.

The asset management group has 58% of its assets invested in fixed-income instruments, 30% in equities, 7% in equity-linked bonds (bonds sold with stock warrants that trade as a unit) and 5% in money market funds.

Among Credit Suisse Asset Management's fixed-income assets, 43% is invested in U.S. dollar-denominated bonds, 10% in Canadian dollar-denominated bonds, 3% in deutsche mark-denominated bonds and 2% in British pound-denominated bonds.

Of the equity assets, 12% is invested in the United States; 4% in the United Kingdom; 4% is divided between Spain and France; 3% is divided among Germany, Switzerland and the Netherlands; 2% is in Japanese stocks; 2% in Far East countries outside Japan; 2% is in Canada; and 1% in Australia.

The asset management group's equity-linked bonds are divided as follows: 3% in yen-denominated securities and 2% each in U.S. dollar- and British pound-denominated securities.

Based in Zurich, Credit Suisse has 75 subsidiaries, branches and representative offices around the world.

Dai-Ichi Mutual Life

TOKYO — Dai-Ichi Mutual Life Insurance Co. does not release information on its investments. It has $127.9 billion.

Nippon Life Insurance

OSAKA, Japan — Nippon Life Insurance Co. is an active fixed-income, equities and real estate equity manager that specializes mainly in investments in Japan. According to InterSec Corp., London, it has $183.4 billion under management.

Nippon Life, a Japanese insurer, manages the money of its insured clients only, of which 17.1% is in fixed-income investments, 26.3% is in equities, and 7.5% is in real estate equity.

Of its total assets, 81.4% is invested in Japan, while 4.7% is invested in the United States, 2.3% in Canada, 1.7% in Australia, 1.3% in France, 0.8% in Germany, 0.5% in the United Kingdom and 0.1% in Switzerland.

Based in Osaka, Nippon Life also has major offices in the United States, Canada, the United Kingdom, France, Germany, Australia, Singapore, Hong Kong and China.

Nomura Group

TOKYO — Nomura Group, with $112.9 billion, does not release information on its total assets.

Information is available, however, on its U.S. subsidiary, Nomura Capital Management Inc., New York.

The asset management group had $3.784 billion under management as of June 30 from the following sources: 49.6% from public funds, 33.7% from corporations, 13.3% from mutual funds and 3.4% form other institutions.

Most of its assets, 53.4%, are invested in Japan. Another 5.65% is invested in the United Kingdom, with 5.13% in the United States, 2.84% in France, 2.79% in Germany and 1.12% in Switzerland.

Most of Nomura's investments, 97.26%, are in equities, with the remainder in fixed-income securities.

Nomura Capital Management is owned by Nomura Investment Management Co., which also has subsidiaries in London and Singapore.

InterSec's 100 largest non-U.S. money managers*

	COMPANY	COUNTRY	AMOUNT
1.	Union Bank of Switzerland	Switzerland	184.9
2.	Nippon Life	Japan	183.4
3.	Credit Suisse	Switzerland	140.0
4.	Swiss Bank	Switzerland	140.0
5.	Zenkyoren	Japan	132.5
6.	Dai-Ichi Mutual Life	Japan	127.9
7.	Nomura Group	Japan	112.9
8.	Sumitomo Mutual Life	Japan	109.5
9.	Post Office Life Insurance Bureau	Japan	102.0
10.	Prudential Corp.	U.K.	83.5
11.	Allianz Group	Germany	82.0
12.	Caisse des Depots et Consignations	France	81.1
13.	Mitsubishi Trust & Banking	Japan	80.2
14.	Meiji Mutual Life	Japan	74.3
15.	Deutsche Bank Group	Germany	73.1
16.	Sumitomo Trust & Banking	Japan	73.0
17.	Mitsui Trust & Banking	Japan	70.6
18.	Daiwa Securities Group	Japan	69.1
19.	Yasuda Trust & Banking	Japan	67.0
20.	Nikko Securities Group	Japan	65.8
21.	Mercury Asset Mgmt.	U.K.	61.4
22.	Credit Agricole	France	60.0
23.	Yamaichi Securities Group	Japan	59.5
24.	Asahi Mutual Life	Japan	58.6
25.	Credit Lyonnais Group	France	56.3
26.	Paribas Group	France	56.2
27.	Nationale-Nederlanden	The Netherlands	56.0
28.	Toyo Trust & Banking	Japan	52.8
29.	Barclays de Zoete Wedd Investment Mgmt.	U.K.	51.5
30.	Union des Assurances de Paris	France	50.4
31.	INVESCO MIM	U.K.	49.6
32.	Dresdner Bank Group	Germany	49.5
33.	Australian Mutual Provident Society	Australia	49.0
34.	Societe Generale	France	49.0
35.	Trygg-Hansa SPP Group	Sweden	47.4
36.	Mitsui Mutual Life	Japan	46.4
37.	Banque Nationale de Paris	France	44.5
38.	Robert Fleming Holdings	U.K.	43.8
39.	Daiwa Bank	Japan	41.2
40.	Iduna Vereinigte Lebensversicherung	Germany	40.5
41.	Schroder Investment Mgmt.	U.K.	40.5
42.	Yasuda Mutual Life	Japan	39.9
43.	Norwich Union Life Insurance	U.K.	39.5
44.	Group des Assurances Nationales	France	39.3
45.	Zurich Insurance Group	Switzerland	39.0
46.	Standard Life Insurance	U.K.	37.2
47.	Lombard Odier & Cie	Switzerland	36.2
48.	PosTel Investment Mgmt.	U.K.	36.1
49.	Legal & General Assurance	U.K.	35.7
50.	Groupe Axa	France	35.0
51.	Caisse de Depot et Placement du Quebec	Canada	34.0
52.	Assurances Generales de France	France	33.9
53.	Chuo Trust & Banking	Japan	33.5
54.	Chiyoda Mutual Life	Japan	33.3
55.	Taiyo Mutual Life	Japan	32.4
56.	Lloyds Bank Group	U.K.	31.3
57.	Commercial Union Assurance	U.K.	30.5
58.	Desjardin	Canada	30.0
59.	Manufacturers Life Insurance	Canada	30.0
60.	Pictet & Cie	Switzerland	30.0
61.	Toho Mutual Life	Japan	30.0
62.	Aegon	The Netherlands	29.7
63.	Swiss Life Group	Switzerland	29.4
64.	Swiss Reinsurance	Switzerland	28.9
65.	Tokio Marine & Fire	Japan	27.8
66.	Baring Investment Mgmt. Holdings	U.K.	27.6
67.	Commerzbank	Germany	27.6
68.	Midland Bank Group	U.K.	27.1
69.	Zurcher Kantonalbank	Switzerland	27.0
70.	Winterthur Group	Switzerland	25.0
71.	Sun Alliance Insurance Group	U.K.	24.9
72.	Royal Insurance	U.K.	24.3
73.	Skandia Group	Sweden	23.9
74.	Banque Indosuez	France	23.2
75.	Kokusai Group	Japan	22.9
76.	Robeco Group	The Netherlands	22.8
77.	NM Rothschild Asset Mgmt.	U.K.	22.4
78.	Kyoei Life	Japan	22.0
79.	Munchener Ruckversicherungs	Germany	22.0
80.	Guardian Royal Exchange Assurance	U.K.	21.7
81.	Scottish Widows Fund & Life Assurance	U.K.	21.1
82.	Yasuda Fire & Marine	Japan	21.0
83.	National Mutual Group	Australia	20.5
84.	Bank Julius Baer	Switzerland	20.4
85.	County Investment Mgmt.	U.K.	20.3
86.	Eagle Star Holdings	U.K.	19.9
87.	Confederation Life	Canada	19.7
88.	Asahi Investment Trust	Japan	19.5
89.	TSB Group	U.K.	19.1
90.	Nihon Dental Life	Japan	18.3
91.	Volksfursorge Lebenversicherung	Germany	18.3
92.	Baltica Holding	Denmark	18.2
93.	Daido Mutual Life	Japan	18.0
94.	Great-West Life Assurance	Canada	18.0
95.	Bank in Liechtenstein	Liechtenstein	17.7
96.	La Baloise	Switzerland	17.5
97.	Daihyaku Mutual Life	Japan	17.4
98.	Kleinwort Benson Investment Mgmt.	U.K.	17.3
99.	ABN/AMRO	The Netherlands	16.9
100.	Taiyo Investment Trust	Japan	16.6

*Euromoney assisted in compiling this data. Source: InterSec Research Corp., Stamford, Conn.

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Post Office Life Insurance

TOKYO — The Post Office Life Insurance Bureau, a division of the Japanese government, does not release information on its investments. It has $102 billion.

Prudential Corp.

LONDON — Prudential Corp. would release only limited information on 43 billion pounds, or about $24.6 billion, of the total $83.5 billion of funds under management.

Of that amount, 49% is in equities, 32% is in fixed-income, 13% is in real estate equity and 1% is in cash.

Prudential has offices in Australia, New Zealand, Canada, Ireland, Italy, the Netherlands, Southeast Asia, Kenya and Malta. It also has a wholly owned subsidiary in the United States.

Sumitomo Mutual Life

TOKYO — Sumitomo Mutual Life, a Japanese insurance company, invests only its own funds. It has 81% of its $109.5 billion in assets invested in Japan, with the next largest amount, 11.5% invested in the United States. Of the remainder, 1% is invested in Germany, 0.9% in the United Kingdom, and 0.5% in France.

The lion's share of Sumitomo's assets, 64.1%, is in fixed-income investments. Another 27.3% of its assets is in equities, with 7.2% in real estate equity.

Sumitomo, based in Tokyo, also has offices in the United States, the United Kingdom, France, Germany, Australia, Singapore, Hong Kong and Canada.

Swiss Bank Corp.

BASEL, Switzerland — Swiss Bank Corp. declined to release any information about its asset management activities. It has $140 billion in assets.

Information on its mutual funds' asset allocations, however, is publicly available.

According to Swiss Bank's most recent annual report, it manages $21.8 billion (15.02 billion Swiss francs) of mutual fund money. Of that amount, 47.5% is in bond funds, 23.2% is in property funds, 21.8% is in money market funds and 7.5% is in equity funds.

Union Bank/Switzerland

ZURICH, Switzerland — Union Bank of Switzerland declined to release information on its $184.9 billion in total assets under management. Information on its recently acquired U.S. subsidiary, UBS Asset Management (New York) Inc. is publicly available, however.

UBS Asset management's assets are 45% from corporations, 28% from institutions, 9% from individuals and 18% from other clients.

Most of those assets, 94%, are invested in the United States.

UBS has 58% of its assets invested in the fixed-income sector, with 26% invested in equities and 13% invested in real estate equity, with another 3% is in oil and gas investments.

Zenkyoren

TOKYO — Zenkyoren, a large Japanese insurance company, invests primarily in Japan, with 97% of its $132.5 billion in assets allocated there. It mostly invests its own money, with only 0.2% of assets coming from pension funds.

Zenkyoren has 2% of its assets invested in the United States, with another 0.5% invested in France and 0.5% invested in Germany.

It has 45% of the assets in fixed-income instruments, with 4% in equities and 0.3% in real estate equities. The remaining assets are in loans.

Zenkyoren has offices in New York and London.

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Combined models basis for strategies

Matrix separates the best from the rest

By William G. Shipman

Merging growth and value investment styles by combining two uncorrelated models leads to a powerful portfolio process that avoids the pitfalls of single-style strategies and can be utilized in either a traditional approach or in a long/short strategy.

One of these models analyzes corporate attractiveness from many traditional perspectives. Cash flow and book value per share, return on equity, as well as price to book and yield are among those employed. These data then are compared to each security's historical ratios to determine whether the stock price is cheap or dear.

The growth in earnings model capitalizes on two important observations: a positive and contemporaneous relationship between the relative performance of stock prices and the change in analysts' earnings forecasts, and serial correlation in the forecasts themselves. When analysts increase their profit estimates, they tend to continue to do so. And not surprisingly, companies whose earnings estimates are increasing tend to outperform those that are not.

Table 1 highlights these points. A universe of about 1,000 stocks is ranked by earnings revisions from the beginning to the end of the quarter. The list is then divided into quintiles. The first column shows the stock price performance of each quintile relative to the universe during the quarter. If one had perfect knowledge of analysts' revisions just three months in advance, one could achieve the relative returns shown in the column.

Table 1

Stock performance based on analysts' earnings forecasts

(Quarterly data 1978-1989)

First quintile	27.02%	8.89%
Third quintile	-0.18	-0.98
Fifth quintile	-23.88	-8.74

Lacking foreknowledge, however, but given the serial correlation in analysts' forecasts, their next revision can be approximated. The second column lists the difference in relative performance earned using the statistical approximation of earnings forecasts.

The technique picks up about a third of the return that should be earned with perfect foresight. Notice that in both cases each quintile's return is ranked in the same order.

About 1,000 companies meet the historical data requirements and trading liquidity to be included in both models. The two models are combined in a matrix. Companies with high value and positive earnings growth end up in the northwest quadrant, the less attractive issues fall to the southeast.

The synthesis of these independent styles into a matrix yields a flexible tool allowing for at least two different strategies: long (or fully invested) and long/short.

The long portfolio is invested in

William G. Shipman is vice president at State Street Asset Management, Boston.

seven broad groups (as defined by Standard & Poor's Corp.), thereby making it sector neutral. A matrix of companies for each group is constructed and positions are taken starting from the northwest quadrant. Specific issues are weighted based on a combination of market capitalization and liquidity. A continuous flow of information guides rebalancing, but trading occurs only when the anticipated pickup in return is significantly greater than all transaction costs.

Risk/return characteristics, which are real-time and net of transaction costs, are shown in Table 2. Notice that although the annualized return is greater than the market's, the strategy's risk, or coefficient of variation, is less.

The long strategy, however, is only half of the story. Simultaneously selling short the unattractive stocks completes the picture.

There are two sources of return from a long/short portfolio: the broker's rebate and stock selection or performance spread. Long positions are selected from the northwest quadrant of the matrix, the short positions from the southeast.

See **Matrix** *on page 22*

Recently, The Equitable further strengthened its financial base through a $1 billion investment from AXA, one of Europe's largest insurers. The global alliance created by this investment gives both companies an unprecedented opportunity to expand their worldwide presence and an almost unlimited potential for growth.

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THE FIT IS RIGHT.

A major factor that will contribute to the success of this new association is the excellent fit between the two companies. In insurance operations, AXA relies heavily on an agency system to deliver its products; The Equitable's sales force of over 9,000 agents is recognized as one of the most productive and professional in the U.S. insurance business.

We both have strongholds in insurance markets that don't overlap: The Equitable in individual life and annuities in the U.S., and AXA primarily in property and casualty in Europe. And since the U.S. is the world's largest insurance market and the European Community is expected to become the world's largest unified market after 1992, the future looks bright indeed for this new global alliance.

In investment operations, The Equitable and AXA should be an especially powerful force. Together we manage well over $180 billion in assets, which, if combined, would create one of the world's largest institutional investors. And when you add AXA's investment knowledge and distribution capabilities in Europe to The Equitable's in the U.S., you open doors for countless joint investment opportunities all over the world.

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Yet another big plus to this association is the philosophical fit of the two companies. Both consist of people who are committed to excellence, take pride in their professionalism, and are dedicated to building great financial institutions by providing quality service to policyholders and investment clients. These are people who will make the most of new opportunities.

At The Equitable, we're looking forward to a world of opportunities. And a future filled with growth for us, AXA and of course, our clients.

To learn more, please write to Richard H. Jenrette, Chairman and CEO, or Joseph J. Melone, President and COO, at The Equitable, 787 Seventh Avenue, Dept. A, New York, NY 10019.

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Table 2

Matrix synthesis portfolio vs. S&P 500

Year	Returns: Portfolio	Returns: S&P 500
1986	24.5%	18.5%
1987	4.1	5.2
1988	24.5	16.8
1989	41.0	31.5
1990	-4.6	-3.2
Annualized return	16.9	13.2
Quarterly standard deviation annualized	21.3	19.2
Coefficient of variation	126.0	145.5
Alpha	3.10	0.0
Beta	1.07	1.0

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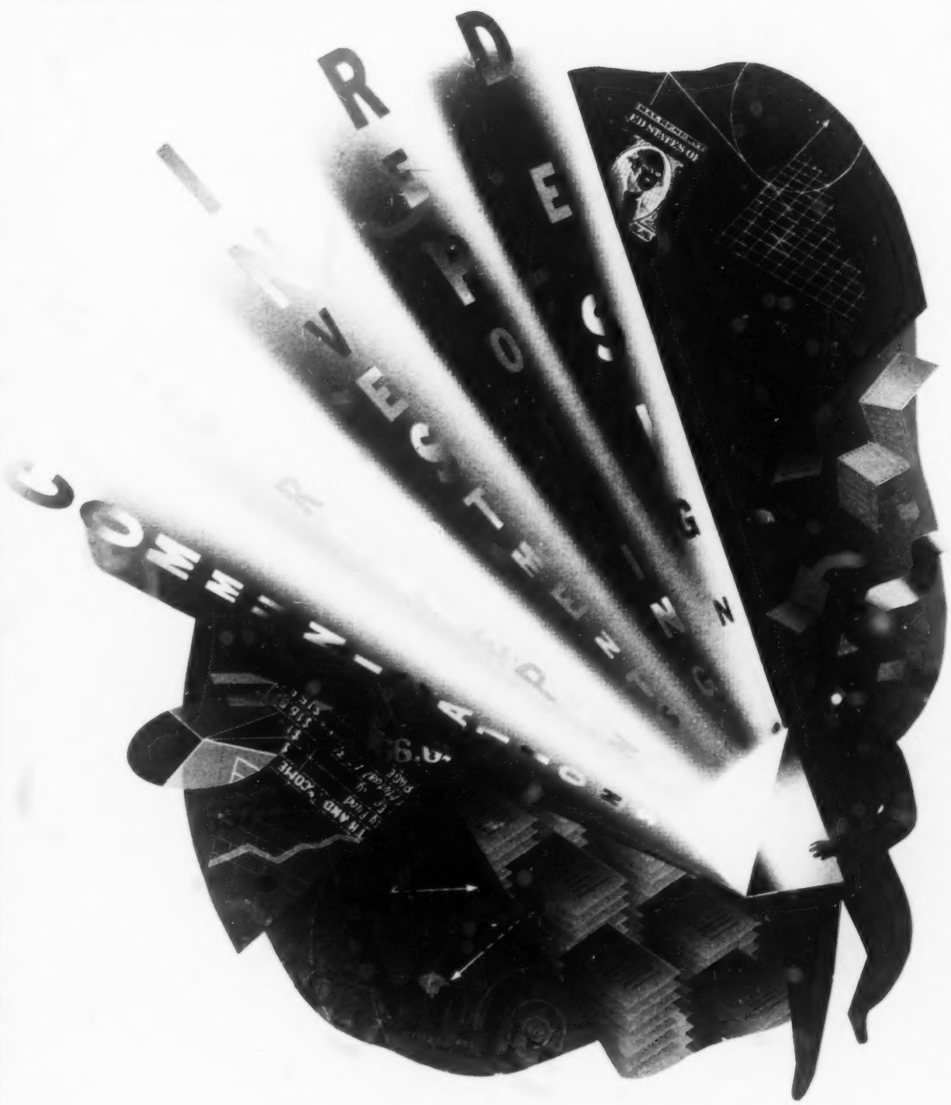

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Matrix

Continued from page 21

The rebate, which approximates the three-month Treasury bill rate, is the interest earned on the proceeds from the short sales. The performance spread is the difference in returns of the long and short positions. This return is "market neutral," or not sensitive to the broad stock market.

To illustrate, assume the attractive stocks consistently outperform the market by six percentage points and the unattractive ones underperform by an equal amount.

Here's how the strategy would perform under three market scenarios:

- If the stock market were flat, the long stocks would be up 6% and the short stocks would be down 6%. The strategy's return would be 12%.
- If the market were up 10%, the long portfolio would rise 16%, the short portfolio, 4%. The strategy's return would be 12%.
- If the market fell 10%, the long portfolio would be down 4% and the short portfolio would be down 16%. The overall return would be 12%.

Because all market environments yield the same 12% return, the investor is virtually indifferent to broad market moves. Shocks — such as Oct. 19, 1987, when the market plunged 508 points — are taken with a yawn. Formal statistical analysis confirms the strategy is uncorrelated with the market.

Between 1985 and 1990, this hedged matrix strategy, after transaction costs, posted an annualized return of 25.4%, with an annualized standard deviation of 9.4%. During the same period, the Shearson Lehman Brothers Aggregate Index returned 11.68%, with a standard deviation of 6.29%; the S&P 500 Stock Index advanced 16.1% with a standard deviation 17.9%. When compared with the S&P 500, the hedged matrix strategy earned three times the return per unit of risk.

The attributes of market-neutral approaches enable the strategies to have many implications. They are a useful alternative to the problem guaranteed investment contract market because returns are substantially higher than GIC and money market rates, but risk is not. The lack of correlation with the S&P allows one to diversify the risk associated with a broad equity index. And, a long/short portfolio can be used to improve returns as an overlay to an index fund without introducing tracking error or additional funding. ■

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AT DEADLINE

Alcoa shifts GIC portfolio

Alcoa has shifted its approximately $450 million GIC portfolio in its $670 million defined contribution plan to Fidelity from Morley Capital.

Eastern pilots sue over plan

A group of retired Eastern pilots is suing Charles G. Dyer, director-Eastern Airlines Variable Benefit Plan for Pilots, alleging mismanagement, the Boston Globe reported. Other defendants include the pilots association and Eastern.

Fund makes foreign move

The $55 million Donaldson Co. pension fund made its first international move, giving Frank Russell Trust's international equity fund an undisclosed amount, said John R. Schweers, treasurer. Other managers' allocations were reduced. Jeffrey Slocum was consultant.

Agway picks PanAgora

The $333 million Agway pension fund hired PanAgora Asset Management to run $15 million in a country-weighted index fund based on EAFE, said John Ryan, director-trust investments.

George Clark joins Rogge

George Clark, formerly a principal at Morgan Stanley International, will join Rogge Global Partners as a partner and director.

RTC picks Equitable Capital

Resolution Trust Corp. has appointed Equitable Capital Management collateral manager for a newly issued $194.5 million collateralized bond obligation.

INSIDE

LINDA SUE SCOTT

In with the new

Basil Schwann will take over as the executive director of the Washington State Investment Board, where trustees are planning to take a more active role in the decision-making process. Page 57.

JOE WILSSENS

General Motors' pension fund is eyeing a commitment to Batterymarch's Soviet Companies Fund.

Funds eye Soviet investing

AT&T, GM and IBM could commit to Batterymarch

By Joel Chernoff

The pension funds of American Telephone & Telegraph Co., General Motors Corp. and IBM Corp. are considering making commitments to Batterymarch Financial Management's Soviet Companies Fund, sources said.

A fourth pension fund also is contemplating an investment in the fund, which is designed to raise $250 million for investment in Soviet joint-stock companies. Batterymarch hopes to close the pioneering fund by Nov. 30 and make its first investments shortly thereafter. Six Soviet companies have been targeted for investment (*Pensions & Investments*, July 22.)

W. Gordon Binns Jr., president of General Motors Investment Management Corp., New York, said GM has been involved with the Soviet Companies Fund since its conception, but said the $34 billion pension fund is not yet ready to make a commitment.

"We're impressed with the progress to date that they've made but find a number of questions remain to be resolved," Mr. Binns said. Problems include the Soviet Union's current political instability, lack of a body of corporate law, need for convertibility of the ruble, and exit mechanisms to permit investors to repatriate principal and profits.

"We're working closely with Batterymarch in the expectation a structure can be evolved that will permit an ERISA fiduciary to be-

See **Soviet** *on page 58*

Company places cap on retiree health costs

By Hillary Durgin

PITTSBURGH — Westinghouse Electric Co. is capping its future contribution to retiree health coverage, and is giving employees an innovative way to save for future medical expenses.

The changes, driven by FAS 106 rules requiring companies to book their retiree medical liabilities, are expected to knock millions of dollars off Westinghouse's bottom line and keep retiree medical costs at current levels.

Separately, Westinghouse will contribute a total of $400 million in company stock to its pension plan in lieu of cash in 1991 and 1992.

The stock contribution "will improve the company's cash flow and it will also represent greater funding for the pension plan than we might have done," said Edwin Goff, director total compensation management at Westinghouse. Improving the plan's funding has been a company objective, he added.

The stock feature was announced last week as part of a comprehensive strategy to improve operating and financial performance at the company, which reported a third-quarter net loss of $1.5 billion on revenue of $3.4 billion, primarily the result of poor performance at its financial services subsidiary.

As part of the recovery plan, the company intends to issue $900 million in equity — including the pension contribution — and im-

See **Cap** *on page 59*

Plan revamp sparks interest in equities

By Hillary Durgin

DETROIT — Michigan Consolidated Gas Co. has overhauled the administration and investment of its $150 million defined contribution plan, enhancing participant control and diversifying the funds.

MichCon's experience provides insight into the objectives and decisions many companies face with the growth of defined contribution plans as a primary source of retirement income.

Spurred by employees' requests for added flexibility and access to their accounts, and concerned over participants' ability to save for retirement, MichCon hired The Putnam Cos. Inc., Boston, as the investment manager, record keeper and trustee for the new program, which went into effect Sept. 1.

MichCon's addition of two new equity options to a low-risk equity option it already offered and an exhaustive education program engineered by Putnam propelled a significant group of plan participants, many of whom are young, to diversify their accounts into equities and away from guaranteed investment contracts.

The shift reduced the fund's fixed-income allocation to 40% from 50% and increased equities to between 25% and 30% from 15% previously. It also achieved

See **MichCon** *on page 56*

Participant education played an important role in Michigan Consolidated Gas' restructuring of its defined contribution plan.

NEWS DIGEST

RICHARD STERGULZ

A capital shortage exists for start-up and emerging-growth companies as institutional investors move away from purchasing the debt of these firms. In Commentary, Page 14.

Trustees for Philadelphia's municipal pension fund are suing the city for failing to make an $87 million contribution. Page 6.

Two recent studies reach different conclusions on whether corporate governance practices, such as poison pills, affect a company's performance. Page 50.

SPECIAL REPORT: MASTER TRUST/GLOBAL CUSTODY

Many sponsors see benefits to maintaining multiple trust and custody relationships. Also, *P&I* reveals the results of its manager satisfaction survey. Page 17.

U.S. banks tout technology as they aggressively pursue master custody relationships with U.K. pension funds, a largely untapped market. Page 18.

FINANCING

Republic Health, a pioneer in pre-packaged bankruptcy filing, will use a $55 million equity infusion from institutions to reduce its debt load. Page 3.

Issuers are expected to flood the asset-backed market with the traditional fourth-quarter surge, but investors are holding back until spreads widen. Page 50.

INTERNATIONAL

AT&T, General Motors and IBM are among the pension funds considering investing in Batterymarch's Soviet Companies Fund. Page 1.

West Japan Plastics taps London-based Baring International Investment Management, making it the first private Japanese fund to hire a foreign adviser. Page 4.

REAL ESTATE

The Massachusetts PRIM board has taken a $130 million hit on its real estate holdings, prompting one of its advisers to offer to resign. Page 2.

The Oregon Treasury Department's commercial mortgage program is under investigation for "apparent irregular transactions." Page 2.

DEPARTMENTS

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PRIM takes hit on realty

Share of JMB's Randsworth at zero; AEW offers to resign

By Terry Williams

BOSTON — The Pension Reserve Investment Management Board has devalued its $395 million real estate portfolio to $265 million.

The fund's real estate managers previously had written the properties down to $330 million; the PRIM board has lopped off another $65 million to reflect future writedowns it expects to incur in the next six months to a year.

Among its poorest performing real estate assets is a $25 million investment in Randsworth Trust PLC, JMB Institutional Realty Corp.'s limited partnership that financed its acquisition of a British property company.

Paul Doane, PRIM executive director, said the board marked down its investment with Chicago-based JMB to zero.

Also, a separate account with Aldrich, Eastman & Waltch, Boston, was devalued. The account size, and the extent of the devaluation, could not be determined.

AEW has offered to resign as manager of the properties. Three of PRIM's other real estate managers have been asked to consider taking over AEW's portfolio.

The problems with Randsworth are related to a second mortgage with Citibank, Mr. Doane said.

"To remain outside of receivership, there will have to be a restructuring or refinancing or new capital" from investors, said Mr. Doane.

According to a source familiar with U.K. real estate, receivership is the British equivalent of foreclosure. It's a quick process in which the bank takes the property from the delinquent lender to pay off the debt. The borrower can't contest it, the source said.

Jerry Claeys, chairman of JMB Institutional Realty, confirmed negotiations are under way to restructure financing used in the acquisition of Randsworth. He declined to elaborate.

Mr. Doane said the board has not yet decided whether to invest additional assets in Randsworth.

"We have agreed as a board to retain the services of a U.K. consultant to evaluate the uniqueness of the U.K. market, and based upon the outcome of the negotiations (and the consultant's report, we will) make a determination at that point."

"Certainly the situation is not encouraging," he said.

Real estate professionals say there is no equity left in the Randsworth deal; Mr. Claeys said "it's hard to determine what the exact value is" because the deal involves private securities.

JMB has asked its investors for additional money before. In 1990, the firm needed more capital for tax advantages.

According to sources, JMB bought Randsworth — a deal valued at $800 million — at the top of the market, and the floating-rate debt was issued just prior to a sharp runup in U.K. interest rates.

Randsworth, sources said, also

See **PRIM** *on page 55*

Do pension funds fuel saving?

Economists debate merits of taxation

By Hillary Durgin

Mounting concern over the collapse of saving in America and the growth in the federal deficit is prompting renewed debate over whether pension funds' tax-exempt status is justified.

Whether pensions increase saving and contribute to economic growth overall are the fundamental questions that have led two prominent economists to disagree on the issue of taxing pensions.

John B. Shoven, director, Center for Economic Policy Research at Stanford University, Stanford Calif., says pension funds are the predominant source of saving in America and warns against taxes that could deter economic growth.

Alicia H. Munnell, senior vice president and director of research at the Federal Reserve Bank of Boston, argues there is no evidence pension funds increase net

See **Debate** *on page 57*

"If we focus on the real problem — national saving — then it should be immediately apparent that improving the federal government deficit by taxing pensions more heavily is a pretty crazy idea."

— John Shoven

"Do you buy anything for the country by not taxing compensation paid in the form of deferred compensation as opposed to wages? I don't see much that I would characterize as high-priority objectives being obtained."

— Alicia Munnell

Oregon mortgages investigated

By Steve Hemmerick

SALEM, Ore. — A consultant's study found "lack of controls" in the Oregon treasury's commercial real estate mortgage program, which also is the focus of an Oregon Department of Justice investigation.

According to officials with the state's treasury and justice departments, the investigation concerns what they are calling "apparent irregular transactions" in the internally managed, $582 million mortgage program. The treasury department also is examining the program.

In June, the treasury office commissioned the study by KPMG Peat Marwick, Portland, which coincided with the suspension of Terry Canby, the supervisor of the mortgage program. Mr. Canby, who also was the real estate investment officer for the treasury's investment division, resigned 10 days after being placed on suspension. He has not been replaced. The program "continues to function," said Michael Ryan, executive assistant to the state treasurer.

The treasury investment division manages $18.6 billion in assets, including the $14.5 billion Oregon Public Employes Retirement System. Pension money is in the mortgage program, but officials won't say how much.

Officials of the Oregon justice and treasury departments wouldn't comment on reports published in the Portland Oregonian that Mr. Canby had made questionable swaps of properties in the mortgage program, including one made to an individual who had business dealings with a company in which Mr. Canby was a partner.

They also declined to comment on the Oregonian's report that Mr. Canby had approved questionable mortgages.

But Jim Lemman, public affairs officer for the Oregon Justice Department, said Mr. Canby is part of his office's investigation. He wouldn't comment on whether the department has determined

See **Oregon** *on page 55*

Activist investors pick new proxy weapons

By Joel Chernoff and Marlene Givant Star

WASHINGTON — 1992 might be the least noteworthy season for shareholder resolutions in years, but the most important in how investors approach corporate boards of directors.

Both shareholder resolutions and votes for corporate directors are part of the proxy process. What's new is investors are realizing withholding their vote for board nominees can be a powerful tool, while the old-style shareholder resolution might become the weapon of last resort instead of the weapon of choice.

The announcement by the $64 billion California Public Employees' Retirement System that it will not submit any proxy resolutions for the 1992 annual meeting season — but instead will negotiate privately with companies on issues concerning boards of directors — bears this out.

The decision was based on the fund officials' belief they could be more effective by working quietly behind the scenes than taking a publicly confrontational stance against corporations.

The fund has entered "the dissociation phase," said Dale Hanson, the California fund's chief executive. Taking a conciliatory attitude, Mr. Hanson said: "We discovered we have not been practicing what we preach" in terms of cooperation.

Still, Mr. Hanson said he hopes corporate executives would not view the change as a sign the fund has become "timid or meek."

"I really think corporations would be making a very serious mistake to look at the lack of resolutions as taking something out of the arsenal," Mr. Hanson said.

Meanwhile, the fund increasingly will rely on withholding votes for company directors when it disapproves of the companies' policies, said Rich Koppes, general counsel.

Similarly, the Pennsylvania Public School Employes' Retirement System is "looking to quiet diplomacy" this year, said Richard D. Michlovitz, assistant counsel to the $16 billion retirement system.

Unlike 1991, when it co-sponsored six resolutions with the California fund, "we will not be filing resolutions this year, but we'll be talking to companies. That's for sure," he said. Two key issues will be executive compensation and confidential voting.

Increased willingness by companies to adopt changes persuaded fund officials to change the policy. "It's certainly a lot more constructive to do things on an amicable basis, especially given the expense and resources devoted to shareholder resolutions," Mr. Michlovitz said.

The Florida State Board of Administration will pursue director compensation issues through letter-writing campaigns, a tactic Florida never has tried before, said Luther Jones, manager of corporate affairs.

Yet anyone who thinks shareholders are folding up their tents is sorely mistaken.

Both California and Pennsylvania fund officials note they might return to shareholder resolutions if this year's experiment is not successful. And New York City and others are sticking with the resolution approach because "it raises issues to a higher level of visibility and helps engender wider support from other institutions," said Kevin Berry, assistant press secretary for New York City Comptroller Elizabeth Holtzman.

Sarah Teslik, executive director of the Council of Institutional Investors, said while "everyone is

See **Proxy** *on page 59*

LINDA SUE SCOTT

Dale Hanson says his fund hasn't become timid, even though its proxy strategy changed.

Minority firms gain $1.3 billion

By Terry Williams

Precision Asset Management, Santa Monica, Calif., joined the ranks of minority- and women-owned firms with pension fund assets under management when it received its first account, a $10 million allocation from the Kansas City (Mo.) Public School Retirement System in August.

Precision isn't alone in its good fortune. 1991 is shaping up to be a year in which more minority- and women-owned firms receive a larger slice of pension business.

Pension funds made 53 hirings of minority managers in the first eight months of the year, accounting for 9.3% of all manager placements, according to the Tracker data base of Eager & Associates, Louisville, Ky. This compares with 40 hires and 4% in the first eight months of 1990, and 19 hires accounting for 2.1% in the same period two years ago, when Eager began collecting the data.

Minority- and women-owned managers gained $1.36 billion in the first eight months of 1991, compared with $597 million a year earlier and $176 million for the same period in 1989, according to Tracker.

Robert Spruill, president of the New York office of the Randolph Group, an investment sales and marketing firm, attributes the greater allocations to minority- and women-owned firms to their increased number. *Pensions & Investments* listed 75 such firms in its Investment Manager Profiles issue (*P&I*, May 20), and more are being formed all the time.

The growth also can be attributed to the greater number of minorities serving on pension fund boards, particularly at public funds, Mr. Spruill said.

"You can't be a minority (trustee) and not change the geography," said Mr. Spruill. "You have your own interests and constituencies.

"It can no longer be the ballgame as usual."

See **Minority** *on page 55*

Minority- and women-owned manager scoreboard

(Assets reported are tax-exempt assets gained in the first eight months of 1991)

Firm	$ millions	Firm	$ millions
NCM Capital Mgmt. Group	301	Kenwood Group	16
[illegible]	[illegible]	[illegible]	[illegible]
Capitalcorp	155	Ariel Capital Mgmt.	10
[illegible]	[illegible]	[illegible]	[illegible]
Tiffany Capital Advisers	91.5	Llama Asset Mgmt.	9
[illegible]	[illegible]	[illegible]	[illegible]
Cisneros Asset Mgmt.	80	V.A. Reid and Associates	7.6
[illegible]	[illegible]	[illegible]	[illegible]
Clemente Capital	67.6	Labadie Capital Mgmt.	6
[illegible]	[illegible]	[illegible]	[illegible]
Denis Wong & Associates	60	MCQ	5
[illegible]	[illegible]	[illegible]	[illegible]
ValueQuest	47	R.M. Leary	4
Smith, Graham	43	Vydox Mgmt. Group	3
RhumbLine Advisers	38	Galleon Capital Mgmt.	2.2
Gramercy Capital Mgmt.	30	Institutional Portfolio Services	2
Zevenbergen Capital	30	Aquarius Capital Mgmt.	1.3
Beekman Capital Mgmt.	28	Edgar Lomax	0.73
LM Capital Mgmt.	27	**Managers of managers**	
CIC Asset Mgmt.	26	Minority Equity Trust (Bankers Trust)	178
Hanover Capital Asset	22	Progress Investment Mgmt.	73
The Marshall Plan	20	Americas Fund (Evaluation Associates)	25
Bond, Procope Capital Mgmt.	17.5		

[illegible] as of June 30 SOURCE: P&I MAY

Private equity deal aids Republic Health

By Marlene Givant Star

DALLAS — A limited partnership in which public pension funds and endowments invested gave Republic Health Corp. a $55 million equity infusion to help the company restructure and reduce its debt load.

The Republic Health transaction is the first for the $220 million Joseph Littlejohn & Levy Fund L.P., New York. Private equity limited partnerships are becoming key sources of capital for companies in their efforts to deleverage.

JLL investors include state pension funds in California and Oregon.

As a result of Republic Health's restructuring, the hospital management company's debt to equity ratio will decline to less than 1.5 to 1, from 7.7 to 1 at the end of April.

Republic Health, one of the large leveraged buy-outs of the mid-1980s, pioneered the increasingly common prepackaged bankruptcy plan in which approval of a majority of bondholders is received before the Chapter 11 filing. The company filed its plan Dec. 15, 1989, and emerged April 30, 1990.

The recapitalization's transactions, expected to close later this week, involve:

- Selling $55 million in equity to the JLL fund;
- Retiring $200 million of senior subordinated first secured refunding "reset" notes due 1994 in exchange for $120 million cash, 3 million shares of new common stock and $15 million of convertible preferred stock;
- Offering to purchase for about $700 per $1,000 principal amount the company's $28.6 million 10% senior subordinated adjustable notes due 1994;
- Obtaining $235 million in new bank financing from a bank syndicate led by Citibank and Chemical Bank.

Each part of the recap is conditional on completion of the entire deal.

JLL's investment involves $40 million of common stock and $15 million of 10% preferred stock convertible into 1.5 million shares of common. The company's common stock was trading at $7.75 a share when the restructuring was arranged earlier this year. It is now trading at $10.50 and recently traded as high as $12.50.

"We're paying $7.75 a share so we're starting on the right foot: a $3- to $5-a-share profit on 5.5 million shares. That's good for starters . . .," said Paul Levy, general partner of JLL in New York.

JLL's infusion helped Republic reduce leverage, as did an $80 million reduction in principal accepted by Pacific Capital Group, Beverly Hills, Calif., holder of the $200 million issue of so-called "first" mortgage notes, and the reduction in debt expected as a result of Republic Health's exchange offer to holders of the adjustable notes.

As a result of the recap, Republic Health expects to increase its stockholders' equity to approxi-

See **Republic** *on page 58*

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Vice President
(303) 293-5588

Equity ■ Balanced ■ Fixed Portfolios

Baring hire a first for Japanese funds

By Anne Schwimmer

TOKYO — The West Japan Plastics pension fund is the first private Japanese fund to hire a foreign independent investment adviser.

The fund picked Baring International Investment Management Ltd., London, to manage a small portion of its portfolio. According to industry sources, at least one public fund has hired independent firms. Previously, there have been a few hirings of foreign banks and insurance companies.

James Williams, managing director at Baring, declined to reveal the amount given the firm. He described the allocation as "quite small," although still a breakthrough for foreign money managers in Japan.

He said some U.S.-based banks, such as Bankers Trust Co. and Citicorp, both of New York, have managed money for Japanese funds.

Prior to an April 1990 change in Japanese pension fund rules, only trust banks or life insurance companies were permitted to manage pension fund money. Now Japanese funds are allowed to allocate funds to money managers out of their new cash flow.

Although many observers believe the move by the plastics fund is the first of many, Chris Nowakowski, president of Inter-Sec Research Corp., Stamford, Conn., doesn't predict a flood of hirings.

"I hope I'm wrong because most of the (foreigners) trying to get that business are our clients, but there's no way." Baring, he said, "pulled a rabbit out of the hat."

He said Japanese funds traditionally hire money managers based on business relationships, rather than on "an arm's length evaluation of money managers."

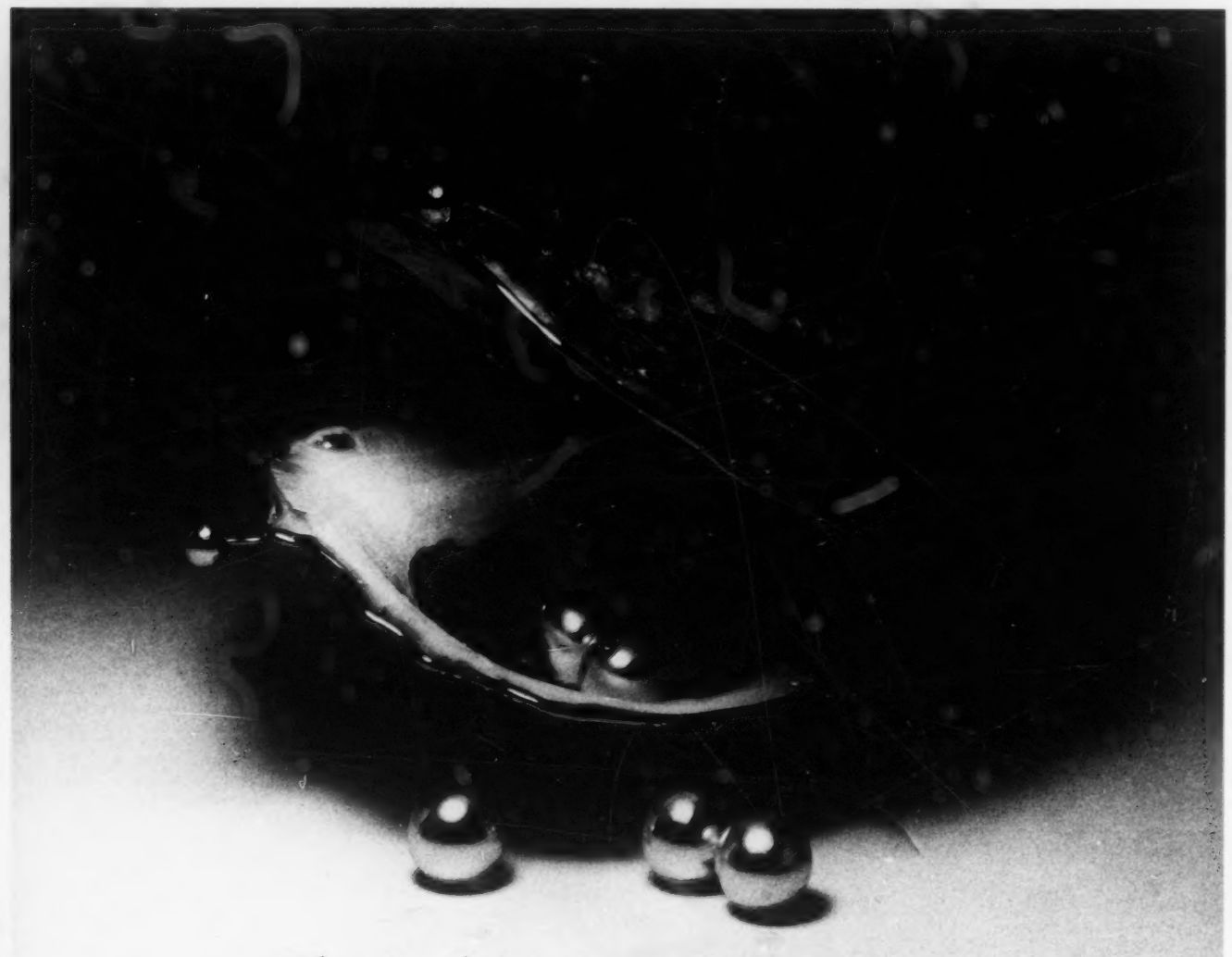
For Baring, this assignment is a foot in the door. "The Japanese pension market is something we've been watching and following for some time," Mr. Williams said. "For our company, in the next few years it will be important if we can build up funds under management from Japanese funds."

Under Japanese law, he said, 50% of the assets it will be managing for West Japan Plastics must be put into Japanese bonds. The rest, however, will be invested internationally in both bonds and stocks, he said.

Baring International Investment Management, a subsidiary of Baring Asset Management Ltd., manages equity, fixed-income and property portfolios. At the end of June, Baring International's ran a total of 5.5 billion pounds, or $3.42 billion. ■

CORRECTIONS & CLARIFICATIONS

- As of June 30, **JMB Institutional Realty Corp.** had $192 million in contributions committed but not yet received. The amount was reported incorrectly in the Sept. 16 issue.
- **Rochester Gas & Electric Corp.**'s equity managers were misidentified in the Sept. 30 issue. They are: PanAgora Asset Managment, Boston; Lehman Ark Management Co. Inc., New York; Kemper Asset Management, Chicago; Provident Investment Counsel, Pasadena, Calif.; Fidelity Investments, Boston; and Trust Co. of the West, Los Angeles.
- The arrows on the **interest-rate swap flow chart** in the Sept. 30 issue should have been reversed. The corporation borrows from the bank, and passes the floating-rate debt on to the swap dealer. The dealer passes the rate on to the government-sponsored entity, which passes back the fixed-rate debt.



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INTERNATIONAL

Analysts see scrumptious gains in Eastern Europe

Chiquita Brands International Inc. is one fresh-fruit producer gearing up for an expected increase in world banana demand.

■ The opening of Eastern Europe is ripe with fresh opportunities, U.S. corporations know. One of the more tasty developments is the huge growth potential in Eastern European demand for bananas, analysts say.

Currently both Chiquita Brands International Inc. and Dole Food Co. are busily buying up plantation land to keep up with a huge increase in global banana demand, according to Michael T. Branca, a food analyst at Mabon Securities, New York.

Chiquita's "business in Eastern Europe will just about triple," Mr. Branca said, noting the average American consumes 25 pounds of bananas yearly but the typical Eastern European has only been able to buy about two pounds a year because of short supply.

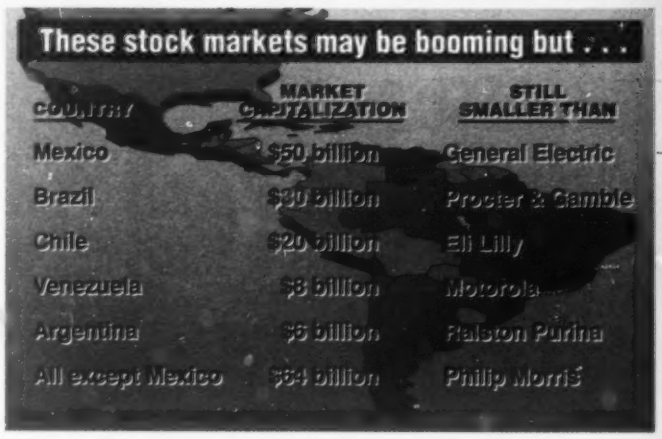
"Doctors recommend that people eat bananas," Mr. Branca pointed out. "The question is not where the demand will come from but will (tropical fruit growers) have the product."

Also trying to get in on the act is Polly Peck International PLC, which is in receivership. Polly Peck owns the Del Monte fresh fruit business, which grows and sells bananas and pineapples.

Mr. Branca said the European fresh fruit market is clearly Polly Peck's domain, but he noted its financial woes will hamper its efforts.

"They're trying to (gear up) but they don't have the same financial leverage as Chiquita and Dole," he said.

— Anne Schwimmer



PEOPLE

New exec director joins Illinois fund

■ The $3.5 billion Illinois State Board of Investments, Chicago, has appointed Jane R. Patterson executive director, replacing Gregory Nagle.

Ms. Patterson was director-corporate finance at Sara Lee Corp., a post she held since August. Previously, she had been director-investments at the $625 million Sara Lee employee benefits plan.

Christian Pappas succeeded her as director-investments; her replacement as director-corporate finance has not been named.

— Sabine Schramm

Frank Magrino, left, Jim Klein, Tom Bash and Mark Eveans left Reimer & Koger to form their own investment management firm.

PUBLIC FUNDS

Trustees find roles reversed

■ In a strange twist of politics, California Republican Gov. Pete Wilson became a champion of pension fund integrity while Democratic State Treasurer Kathleen Brown and State Comptroller Gray Davis favored legislation permitting deferrals of contributions to the California State Teachers' Retirement System.

The legislation, A.B. 191, would have permitted the Los Angeles and San Francisco school districts to postpone $94 million in pension contributions due in the first half of 1992. Instead, the school districts would have paid a higher contribution rate over a 20-year period (*Pensions & Investments*, Sept. 16).

Gov. Wilson, who was reviled publicly for taking $1.6 billion in assets from the California Public Employees' Retirement System, this time took the side of the teachers' fund. In his veto message, Gov. Wilson wrote: "The teachers' retirement fund is not a bank to which needy school districts can turn for contribution relief when times are hard."

Ms. Brown and Mr. Davis were the only two of nine teachers' fund trustees to oppose a motion against the legislation. Observers believe the active political role of Los Angeles teachers and school district had a lot to do with their vote.

Representatives for Mr. Davis and Ms. Brown said sufficient safeguards were put in place to protect the integrity of the fund and ensure a payback of the assets.

— Joel Chernoff

REAL ESTATE

Office building outlook red, red, red

■ Financial pain suffered by institutional owners of office buildings will be "unrelenting over at least the next two years," a report by Salomon Brothers Inc., New York, predicts.

In the report, "The U.S. Office Market: Hitting Bottom With a Thud," Salomon Brothers researchers said that in real terms, office building valuations are off 39% since peaking in 1984.

But, the report said, property appraisals now lag current market reality by at least 15%, and office values, already sharply reduced, will fall further.

At the same time, newly constructed buildings are about to be leased "in the worst possible environment," the report said.

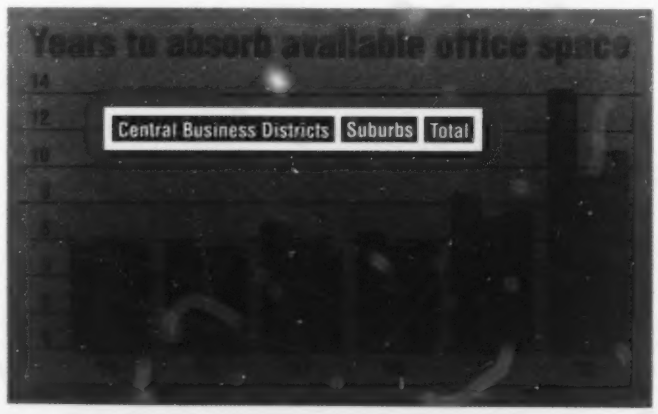
Fundamental demand for office space is continuing to weaken. "White-collar employment is no longer a growth industry, as a panoply of office-using industries including finance, insurance, real estate, accounting, advertising and law are restructuring themselves in an increasingly competitive environment," the report noted.

As a result, not as much space was needed in 1990 as in past years. The additional office space needed in 1990 was only 65 million square feet, compared with 122 million square feet in 1987.

Salomon Brothers predicts office space needs will fall to 43 million square feet per year during 1991 and 1992.

Real rents have declined 29% since 1987 and 46% since 1982. "Continued high vacancy rates and cost-conscious tenants will sustain downward pressure on rents over the next few years," the report said.

— Steve Hemmerick



MONEY MANAGERS

Manager rises above controversy

■ Some people are coming through the mess at the Kansas Public Employees Retirement System smelling like a rose.

Eveans, Bash, Magrino and Klein Inc. opened its doors in August after the four namesakes left Reimer & Koger Inc., the money management firm that has been blamed for much of the $100 million-plus losses the Kansas system faces from its private placement portfolio.

But Mark Eveans, Tom Bash, Frank Magrino and Jim Klein were responsible for three other profit centers at the firm, and were not involved with the private placement business. So the men — who headed the areas that provided traditional balanced, stock and bond money management services — struck out on their own.

In what has been termed an amicable separation, the men also negotiated the rights to continuing servicing the Reimer & Koger clients they had, and opened their doors with more than 100 clients and $500 million under management.

Recently, the firm signed two more clients, a private individual and a Taft Hartley fund.

"The Taft-Hartley fund, through its consultant, did a lot of quizzing," said Mr. Bash, the chief marketing officer for the new firm. "We made it clear we had no involvement with the KPERS private placements."

He said it also helped that the firm's Taft-Hartley track record (partly acquired at Reimer & Koger) so far this year is ranked at the top of the INDATA Taft-Hartley fixed-income universe.

— Curtis Vosti

REAL ESTATE

New realty firm out of the gate at a nice gallop

■ Kensington Realty Advisors, Chicago, by just about any measure, is off to a quick start.

When James S. Smith, managing principal and founder of Kensington, left Bennett & Kahnweiler Realty Advisors to start his own firm, he thought he might have a two- to three-person staff that did consulting work for investors on a project basis.

Since then, he has been joined by seven other B&K alumni, including James S. Lee, a Kensington principal, as well as one other professional. The firm oversees a property portfolio with a gross value in excess of $700 million.

The most recent professionals to join Kensington are Thomas Elmer, vice president-portfolio and asset management; Ronald A. Gold, vice president and director of client service; Daniel L. Webb, investment manager; Thomas G. Fleming, portfolio manager; Mark R. Kirincich, assistant portfolio manager; Daniel B. Ault, investment analyst; and Robin L. Altman, financial manager.

Ms. Altman previously worked at The John Buck Co., Chicago; the other six worked at B&K.

The firm also got a boost when the Teachers' Retirement System of the State of Illinois, Springfield, picked Kensington to take over an existing $400 million portfolio that had been managed by Bennett & Kahnweiler.

While bringing in new clients is always important, especially for a new firm, Mr. Smith said the firm's focus now is on aggressive asset management. "Jim Lee and myself, as principals of the firm, are probably spending about 70% of our time on asset management," including visiting markets and properties, he said.

— *Chuck Paustian*

DALE FAHEY

Newly formed Kensington already has responsibility for more than $700 million in properties. Its investment committee members are Jim Smith, left, Jim Lee, Ron Gold and Tom Elmer.

PEOPLE

World Bank exec moves to BONY

■ Althea Duersten has joined The Bank of New York as a senior vice president in charge of fixed income for the bank's asset management division, a new position.

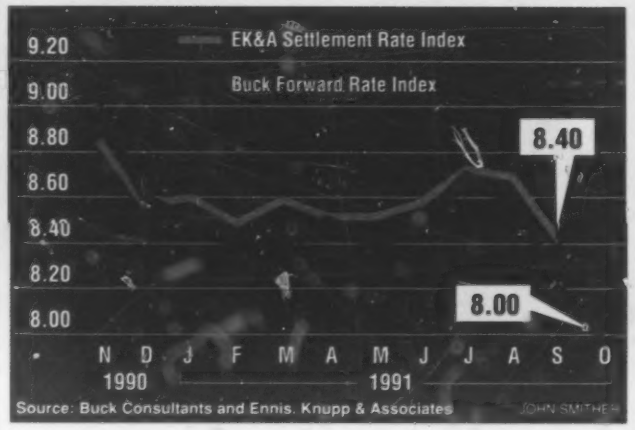
Prior to joining Bank of New York, Ms. Duersten was senior manager for North America in the investment department of The World Bank. Sanjiv Kumar replaces her at the World Bank.

From 1985 to 1987, Ms. Duersten was a vice president with Shearson Lehman Brothers in its global finance department, and from 1982 to 1985, an assistant vice president in the corporate finance department with E.F. Hutton & Co.

A 1972 graduate of Tufts University, with a bachelor's degree in history, Ms. Duersten also earned a master's degree in international business and economics from Tufts Fletcher School of Law and Diplomacy.

— *Terry Williams*

Indexes for valuing pension liabilities under FASB 87



INTERNATIONAL

Japanese deals in U.S. plummet

■ Weak financial markets, heightened U.S. sensitivity to foreign investment and the recession's absence of competitive bidding for strategic corporate assets have sharply reduced Japanese investment in the United States.

Instead, Japanese companies are favoring corporate tie-ups that do not involve an ownership stake.

In the first six months of 1991, Japanese deals in the United States totaled 55, about half the number of deals in 1990's first half. Total disclosed deal volume plunged by two-thirds, to $1.4 billion from $4.2 billion, according to Japan M&A Reporter, a publication of Ulmer Brothers Inc.

Investments in Europe also fell, although not as dramatically. There were three more deals in 1991's first half, but volume was 13% below its first-half 1990 level.

While in both the 1990 and 1991 periods acquisitions and investments (stakes of 50% or less) were dominant, this year's deals were less costly.

Industry preferences on both continents shifted away from heavy manufacturing and industrial machine makers and concentrated more on the retail and service sectors.

— *Marlene Givant Star*

SOFTWARE

Lotus offering look at insurers

■ In what can only be described as a timely event, Lotus Development Corp. has unveiled a data base package that provides access to detailed financial information on more than 4,700 insurance companies.

CD/Insurance, the Lotus package, is updated monthly with data provided by the National Association of Insurance Commissioners from statutory financial information filed by the companies with the NAIC. The information goes beyond that provided by major rating agencies and includes financial statements, underwriting and investment results and loss history.

Gary Brach, Lotus product manager, said CD/Insurance will provide about 1,400 variables of information about insurance company investment portfolios including real estate, high-yield bonds and other asset classes as assessed by NAIC.

"It has been very tough to get your hands on this type of data in an easy-to-use format."

The package, which is delivered on compact disc and operates on a PC with a CD-ROM reader, will be of interest to GIC managers, consulting groups, investment bankers, plan sponsors and other institutional investors.

A charter version of CD/Insurance will be available in March. Cost for the package is $10,000 for both the CD/Insurance: Property and Casualty, and CD/Insurance: Life, Accident and Health packages, or $6,000 for either data base.

— *Fred Williams*

PENSION FUNDS

Thiokol scrubs annuity addition

■ Thiokol Corp. has delayed its planned addition of an annuity option for its $350 million 401(k) plan because of concerns about the insurance industry.

The Ogden, Utah, company had signed The Travelers Insurance Co., Hartford, Conn., for the planned fourth option to its defined contribution plan, but decided against it because the insurer was downgraded to A2 from A1 by Moody's Investors Service, New York, July 19.

The plan already has three options for current employees, and staff had wanted to add the option so retiring employees could roll over their accounts into one annuity. But after the downgrades of Travelers and other top insurers, the proposal wasn't even brought to the board.

— *Curtis Vos*

Thiokol Corp.'s plans for an addition to its 401(k) were put on hold because of the downgrade of The Travelers Insurance Co.

Multiplying the benefits

Some plans spurn trend toward consolidation of banks

By Fred Williams

A significant number of pension plan sponsors retain multiple trust and custody relationships within a single plan and believe it offers some advantages despite the trend toward consolidating banking relationships.

Such funds as those of General Motors Corp., Oregon Public Employes Retirement System and TIAA-CREF have multiple trustees, citing their large size, needs for specialization and interest in maintaining competition among the banks.

Consultants and master trust bankers, however, believe the pension industry clearly is moving to consolidate master trust arrangements in order to eliminate overlaps in accounting systems, multiple reports and, in most instances, lower overall trust costs.

"I can't think of any advantages (to having multiple trustees); I can think of only disadvantages," said Russell Parkhurst, consultant with Buck Consultants Inc., New York. He said the trend is toward consolidation of trust arrangements in order to achieve consistent accounting and a single reporting source.

Mr. Parkhurst agrees, however, some plans might find advantages in using one master trustee for the defined benefit plan and another for the defined contribution plan because of the detailed record keeping required for defined contribution plans.

The competitive angle is an important one to some pension executives. R. Charles Tschampion, director-portfolio strategy and manager relations group at the $31 billion GM plan, New York, said GM uses two master trust banks in its domestic plan — Bankers Trust Co. and Mellon Bank — because of the plan's size as well as to "keep a degree of competition going."

Mr. Tschampion said GM has simply "grown up" with multiple master trust relationships since 1983 when it adopted a master trust arrangement. "At the time we were so large that we felt it prudent to have two," he said. "Today perhaps it may be more efficient to have one, but we can't differentiate between the two" because both are equally competent.

The $12.5 billion Oregon Public Employes Retirement System, Salem, recently hired Bank of New York to replace Chase Manhattan Bank to oversee the system's fixed-income assets, and uses Morgan Stanley Group Inc. as global equities custodian and First Interstate Bank of Oregon as domestic equity custodian.

James George, investment manager at Oregon, said the use of multiple custodians has been "sort of a tradition here."

He said aside from the pension plan, the Oregon treasury department uses "several" outside banks for various purposes.

He said the retirement system uses multiple custodians for their strengths in specific areas. "Some

See **Banks** *on page 47*

Master trust/custody banks ranked by U.S. tax-exempt assets

Firm	$ millions Total	Master trust	Master custody
State Street	315,229	143,266	171,963
[illegible]	[illegible]	[illegible]	[illegible]
Northern Trust	197,658	120,783	76,875
[illegible]	[illegible]	[illegible]	[illegible]
Bank of New York	162,982	74,095	88,887
[illegible]	[illegible]	[illegible]	[illegible]
Mellon Bank	151,759	129,334	22,425
[illegible]	[illegible]	[illegible]	[illegible]
Security Pacific	77,000	22,000	55,000
[illegible]	[illegible]	[illegible]	[illegible]
Wachovia	43,816	35,427	8,389
[illegible]	[illegible]	[illegible]	[illegible]
NBD Bank	37,673	13,630	24,043
[illegible]	[illegible]	[illegible]	[illegible]
Chemical Bank	29,699	5,096	24,603
[illegible]	[illegible]	[illegible]	[illegible]
C&S/Sovran Trust	27,802	9,627	18,175
[illegible]	[illegible]	[illegible]	[illegible]
U. S. Trust	26,000	19,300	6,700
[illegible]	[illegible]	[illegible]	[illegible]
Boatmen's Trust	21,998	2,744	19,254
[illegible]	[illegible]	[illegible]	[illegible]
Continental Bank	20,609	14,532	6,077
[illegible]	[illegible]	[illegible]	[illegible]
First Interstate/Calif.	15,314	12,314	3,000
[illegible]	[illegible]	[illegible]	[illegible]
LaSalle Nat'l Trust	9,212	1,512	7,700
[illegible]	[illegible]	[illegible]	[illegible]
Riggs Nat'l Bank	7,000	na	7,000
[illegible]	[illegible]	[illegible]	[illegible]
Norwest Bank	5,037	3,500	1,537
[illegible]	[illegible]	[illegible]	[illegible]
Security Trust	4,230	1,379	2,851
[illegible]	[illegible]	[illegible]	[illegible]
Fleet/Norstar	3,801	3,059	742
[illegible]	[illegible]	[illegible]	[illegible]
Marine Midland	3,000	2,000	1,000
[illegible]	[illegible]	[illegible]	[illegible]
Hibernia Nat'l	1,479	356	1,123
[illegible]	[illegible]	[illegible]	[illegible]
Bank IV	902	691	211
[illegible]	[illegible]	[illegible]	[illegible]
Bank One Ohio	658	549	109
[illegible]	[illegible]	[illegible]	[illegible]
Commerce Bank	375	369	6
[illegible]	[illegible]	[illegible]	[illegible]
Barnett Banks Trust	200	0	200
[illegible]	[illegible]	[illegible]	[illegible]
Total	**2,205,809**	**1,157,055**	**1,048,754**

Chicago banks rank tops in poll

By Sabine Schramm

Three Chicago banks ranked highest in a *Pensions & Investments* survey measuring investment manager satisfaction with master trust/custody services.

Continental Bank, The Northern Trust Co. and Harris Trust & Savings Bank topped the overall rankings of the 30 master trust banks included in the survey with an average rating of 4.17, from 30 responses; 4.12, from 102 responses; and 4.1, from 59 responses; respectively.

The survey indicated general satisfaction with master trust bank services, with overall rankings ranging from Continental's 4.17 (very good) to Mitsubishi Global Custody's 3 (good).

On a scale of 1 (poor) to 5 (excellent), 171 investment managers evaluated the banks on a variety of categories. In addition to overall satisfaction, the banks were ranked on security clearance; reporting accuracy; global custody services; up-to-date cash/transaction activity reports; automatic investment of cash balance; prompt cash crediting (principal and income); account representative capabilities; and cooperativeness.

The high overall ranking of the three Chicago banks might be more a measure of people than of technology.

Phil Schneider, consultant for Wyatt Asset Service Inc., Chicago, speculated that Harris and Northern have been able to maintain staff while some institutions have had a lot of turnover. He felt "continuity, resulting in smoother working relationships," resulted in the positive responses.

Tony Hammock, manager of the investment management services group at Continental Bank, said there had been a conscious effort

See **Rank** *on page 47*

Master trust/custody banks ranked by U.S. taxable assets

Firm	$ millions Total	Master trust	Master custody
Chase Manhattan	297,400	0	297,400
[illegible]	[illegible]	[illegible]	[illegible]
U. S. Trust	217,000	51,000	166,000
[illegible]	[illegible]	[illegible]	[illegible]
Continental Bank	81,716	0	81,716
[illegible]	[illegible]	[illegible]	[illegible]
Manufacturers Hanover	42,800	2,500	40,300
[illegible]	[illegible]	[illegible]	[illegible]
Mellon Bank	32,403	2,251	30,152
[illegible]	[illegible]	[illegible]	[illegible]
Bank of New York	27,488	24,136	3,352
[illegible]	[illegible]	[illegible]	[illegible]
State Street	20,181	6,070	14,111
[illegible]	[illegible]	[illegible]	[illegible]
Chemical Bank	9,553	0	9,553
[illegible]	[illegible]	[illegible]	[illegible]
CoreStates Bank	5,813	0	5,813
[illegible]	[illegible]	[illegible]	[illegible]
Ameritrust	5,063	0	5,063
[illegible]	[illegible]	[illegible]	[illegible]
Norwest Bank	3,180	0	3,180
[illegible]	[illegible]	[illegible]	[illegible]
Bank IV	2,428	0	2,428
[illegible]	[illegible]	[illegible]	[illegible]
C&S/Sovran Trust	2,255	392	1,863
[illegible]	[illegible]	[illegible]	[illegible]
Security Trust	2,058	302	1,756
[illegible]	[illegible]	[illegible]	[illegible]
Boston Safe Deposit	1,275	575	700
[illegible]	[illegible]	[illegible]	[illegible]
Hibernia Nat'l	832	0	832
[illegible]	[illegible]	[illegible]	[illegible]
NBD Bank	783	0	783
[illegible]	[illegible]	[illegible]	[illegible]
First Trust	187	0	187
Total	**1,399,291**	**95,444**	**1,305,847**

JOHN J. BORKOWSKI

Master trust/custody banks ranked by new tax-exempt business

Firm	$ millions Total new business	New master trust	Clients	New master custody	Clients
Bankers Trust	21,400	3,100	8	18,300	23
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chase Manhattan	17,000	16,600	6	400	1
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Security Pacific	12,000	1,000	20	11,000	45
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Northern Trust	8,411	5,180	12	3,231	12
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NCNB	4,382	0	0	4,382	11
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Boston Safe Deposit	3,200	1,900	1	1,300	6
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First Interstate/Calif.	2,500	2,500	4	0	0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C&S/Sovran Trust	1,660	640	3	1,020	2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NBD Bank	1,204	159	15	1,045	11
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bank of America	900	400	17	500	10
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chemical Bank	583	97	5	486	6
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Manufacturers Hanover	500	0	0	500	3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
First Trust	434	355	2	79	1
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Continental Bank	320	320	13	0	0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marine Midland Bank	300	100	5	200	2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Riggs Nat'l Bank	300	na	na	300	3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fleet/Norstar	141	113	4	28	3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Barnett Banks Trust	70	0	0	70	1
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Signet Trust	37	37	1	na	na
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bank One Ohio	20	0	0	20	3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SunTrust Banks	6	0	0	6	1
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	**134,788**	**52,938**	**334**	**81,850**	**317**

JOHN J. BORKOWSKI

U.S. banks making inroads on U.K. turf

By Marlene Givant Star

Capitalizing on the sophisticated technological capabilities they've developed in the U.S. market, big American master trust banks are aggressively spreading the gospel of master custody to U.K. pension funds, a largely untapped market for such services.

While U.S. banks such as State Street Bank & Trust Co., Boston; Northern Trust Co., Chicago; and Bankers Trust Co., Chase Manhattan Bank N.A., and Citibank N.A., all of New York; have made impressive inroads in a relatively short time in the U.K. market, U.K. banks have been slow to penetrate both the U.S. global custody market as well as the nascent master custody market on their own turf *(see related story)*.

U.S. banks are attracted by the size of the U.K. pension fund market and are hopeful that the funds' shift to specialized management, increased regulatory scrutiny of back office procedures and heightened attention to cost-cutting measures will lead to greater acceptance of the master custody concept.

Master trust is a new concept to U.K. funds, which are not required to separate fund management and custodial services. Externally managed funds, which tend to have fewer specialist managers than their U.S. counterparts, often get custody as part of their managers' service. Internally managed pension funds, the larger of which have their own back-office capabilities, typically use a U.K. domestic bank for a basic custody service.

Since U.K. funds appoint corporate officials rather than banks as trustees, the U.K. version of master trust has come to be known as master custody. U.K. funds switching to a sole master custodian — mainly U.K. subsidiaries of U.S. multinationals — are lured by the desire for centralization of the administrative function and the ability to take advantage of value-added services like cash management and securities lending. It also is easier to make manager changes.

"The market here is an upside-down version of what you'd find in the states," said Colin Grimsey, managing director-global custody of Chase Manhattan Bank, London, whose clients include U.K. subsidiaries of Ford Motor Co., Honeywell Inc., Amoco Corp. and Mobil Corp.

"There must be a material cost benefit or perceived benefit in terms of efficiency" for a fund to adopt master custody, said Mr. Grimsey.

The United Kingdom — with 225 billion pounds ($393.8 billion) — has one of the largest concentrations of pension fund assets outside the United States. While half of the funds are externally managed, less than 5% of those funds have master custody relationships, according to Bankers Trust. Unit trusts, another target of U.S. banks, have 50 billion pounds ($87.5 billion) in assets.

The United Kingdom has no equivalent of the 1974 Employment Retirement Security Act, which requires U.S. pension funds to keep fund management and custodial services separate and only with a U.S. bank.

European regulators, however, are paying more attention to the custody and settlement of pension assets. Last year the Group of Thirty international bankers drew up a list of nine recommendations to bring settlements into line with one another. Such standardized procedures attempt to reduce costs for the custodians and might tempt more players into the market.

The Investment Management Regulatory Organization, the U.K. body overseeing investment managers, is putting pressure on money managers, the traditional custody providers, to more closely monitor costs. This could prompt them to stop providing custody for clients, a business they have not found too lucrative, said Jennifer Tretheway, vice president of Northern Trust.

For now though, education is needed.

"We're talking to a lot of funds about the advantages of master-trust. Fewer people are buying than we would wish," Mr. Grimsey said. Echoed another U.S. bank official who asked not to be identified: "Half the market doesn't understand why you would need one. The market is kind of shocked to hear there's even a facility of that nature."

Last year 15 U.K. funds conducted searches for master custodians. Only five decided to appoint one, according to Patric Foley-Brickley, vice president of Chase.

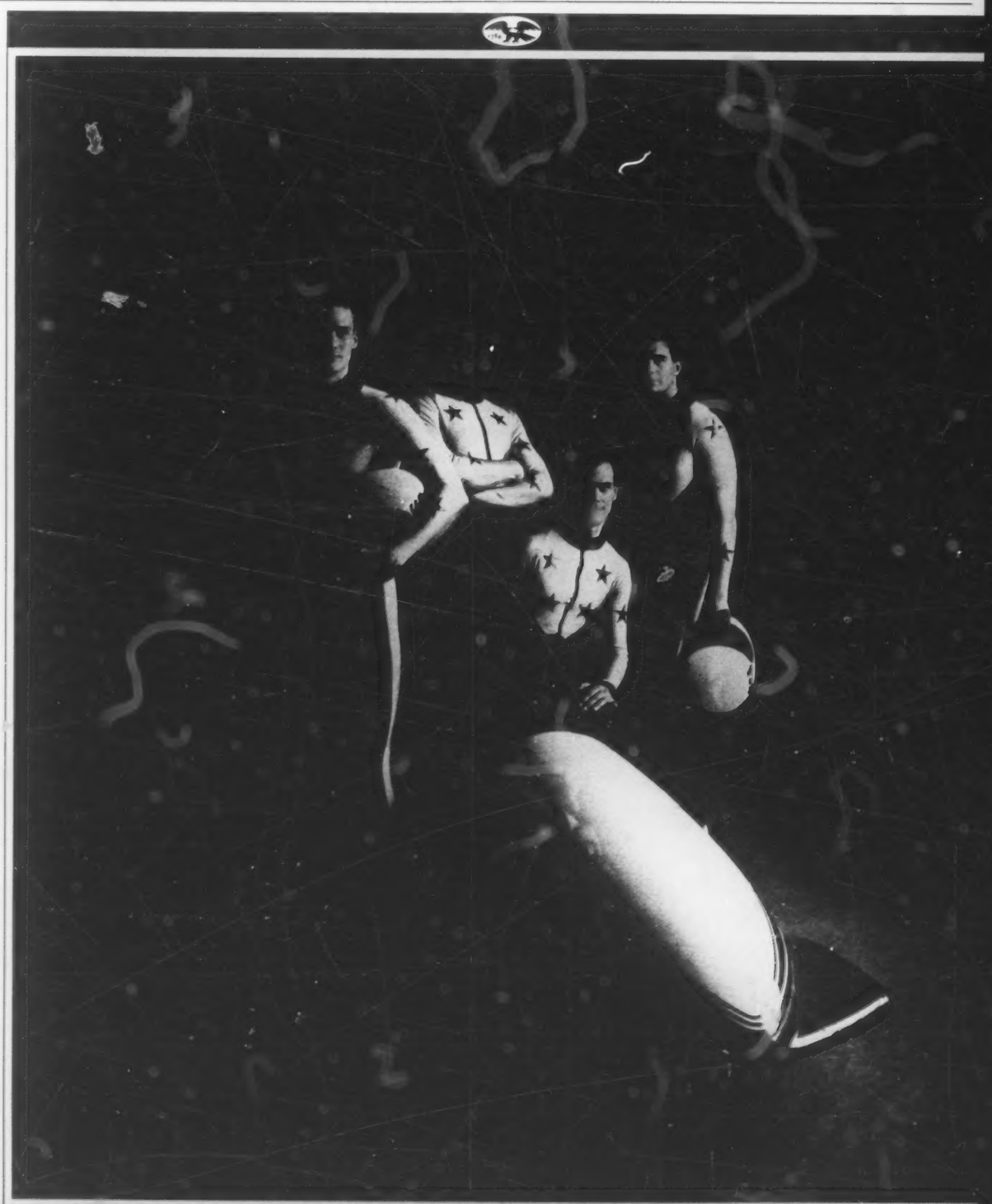
Another obstacle is that U.K. funds "are less demanding in terms of frequency and amount of information on portfolios," said Ms. Tretheway, noting that while quarterly or more frequent performance reporting is the norm in the United States, annual reporting is common in the United Kingdom.

Chase officials believe the U.K. regulatory environment will change to require separation of valuation systems and fund management. Consulting firms that do performance measurement have to rely on the validity of a fund manager's data. They are not mandated to check its accuracy.

In addition to U.K. arms of U.S. multinationals, a number of superannuation funds, the U.K. equivalent of U.S. public funds, have begun to recognize the administrative efficiency of having one master custody bank instead of multiple custodians for six or seven investment managers, said Anthony Galliano, vice president of Citibank, London. Citibank has been marketing in the United Kingdom since 1984 and has more than 8.57 billion pounds ($15 billion) in U.K. pension fund assets under master custody for more than 20 clients including British Gas PLC.

As more U.K. funds adopt specialized management, master cus-

See **Inroads** *on page 46*



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MASTER TRUST

Ameritrust
900 Euclid Ave., Cleveland, Ohio 44101-0937; (216) 737-4089

	($ millions)
Domestic master trust assets	$7,998
Tax-exempt	$7,998
Domestic master custodial	$12,415
Tax-exempt	$7,352
Taxable	$5,063
Domestic master trust clients	182
Domestic master custodial clients:	
Tax-exempt	24
Taxable	5
Account supervisors	8
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Ameritrust reported new, tax-exempt domestic master trust business of $3.369 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $839 billion.

The primary accounting method is trade date. Settlement date also is offered.

Services offered in the basic master trust/master custodial agreement are securities lending, global custody, performance measurement, performance analytics, on-line inquiry, benefit payments and cash management. Reporting is available for additional fees.

Record-keeping services offered include 401(k), profit sharing, ESOP, thrift and savings.

New features include on-line performance measurement.

Fees are based on market value at quarter end, plus transactions for the quarter.

The client contact is Gary W. Queen.

BancOklahoma Trust Co.
P.O. Box 2300, Tulsa, Okla. 74192; (918) 588-6443

	($ millions)
Domestic master trust assets	$1,407
Tax-exempt	$1,407
Domestic master custodial	$754
Tax-exempt	$754
Domestic master trust clients	27
Domestic master custodial clients	1
Account supervisors	5
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

BancOklahoma Trust Co. offers cash/settlement date as the primary accounting method. Fully accrued/trade date also is offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, securities settlement, income collection, full reporting, cash management and wire transfers.

On-line reporting, securities lending, global custody, benefit disbursements and performance measurement are available for additional fees.

Fees are transaction- or asset-based.

Phillip J. Owings is client contact.

Bank of America
1 S. Van Ness Ave., San Francisco, Calif. 94103; (415) 241-7567

	($ millions)
Domestic master trust assets	$13,500
Tax-exempt	$13,500
Domestic master custodial	$85,500
Tax-exempt	$16,500
Taxable	$69,000
Domestic master trust clients	420
Domestic master custodial clients:	
Tax-exempt	360
Taxable	570
Account supervisors	43
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Bank of America reported new, tax-exempt domestic master trust business of $400 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $500 million.

The primary accounting method is settlement date-cash basis. Average cost, LIFO, FIFO, trade date, accrual and unitized methods also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, trade settlement, accounting and reporting, automatic cash sweep, collection and crediting of income, corporate action and proxy notification, benefit disbursements and tax reporting.

Collective investment funds and investment management services, participant record keeping, prototype plans, employee communications and enrollment packages, performance measurement and analytics, on-line access, securities lending and global securities services are available for additional fees.

New features include enhanced on-line inquiry and report functions and electronic data download capabilities enabling report formatting.

Fees are based on market value and transactions.

Warren L. Metzger is the client contact.

Bank of Boston
150 Royall St., Canton, Mass. 02021; (617) 575-2171

	($ millions)
Domestic master trust assets	$1,936
Tax-exempt	$1,936
Domestic master custodial	$3,194
Tax-exempt	$3,194
Domestic master trust clients	32
Domestic master custodial clients	15
Account supervisors	6
Reports available on-line:	
Monthly transaction	
Asset & liability	

Bank of Boston reported new, tax-exempt domestic master trust business of $62 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $480 million.

The primary accounting method is trade date. Settlement date and cash basis, as well as FIFO, LIFO, average cost, highest cost, lowest cost and specific tax lot, also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping and settlement, income collection, corporate action processing, cash management and accounting and reporting.

Global custody, benefit disbursements, securities lending, on-line access, plan accounting and endowment donor accounting are available for additional fees.

Fees are based on market value, transactions and portfolio changes.

John Houlihan is the client contact.

Bank IV
P.O. Box 4, Wichita, Kan. 67201-0004; (316) 261-4555

	($ millions)
Domestic master trust assets	$691
Tax-exempt	$691
Domestic master custodial	$2,639
Tax-exempt	$211
Taxable	$2,428
Domestic master trust clients	131
Domestic master custodial clients:	
Tax-exempt	19
Taxable	19
Account supervisors	9
Reports available on-line:	
Monthly transaction	
Asset & liability	

Bank IV offers trade date with accruals as the primary accounting method. Trade date without accruals, settlement date with accruals and settlement date without accruals also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, cash sweeping, individually designed statements and trusteeship.

Performance analysis and on-line, direct access terminals are available for additional fees.

Fees are based on number and type of securities, number of transactions and the dollar value of assets.

Roger A. Ramseyer is the client contact.

Bank of New York
1 Wall St., New York, N.Y. 10286; (212) 495-1784

	($ millions)
Domestic master trust assets	$98,231
Tax-exempt	$74,095
Taxable	$24,136
Domestic master custodial	$92,239
Tax-exempt	$88,887
Taxable	$3,352
Domestic master trust clients:	
Tax-exempt	206
Taxable	11
Domestic master custodial clients:	
Tax-exempt	84
Taxable	13
Account supervisors	50
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Bank of New York reported new, tax-exempt domestic master trust business of $905 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $11.13 billion.

The primary accounting method is trade and settlement date. Average cost, tax lot basis, amortized and liability methods also are offered.

Services offered in the basic master trust/master custodial agreement are global safekeeping, full trust administration, multiple STIFs, zero balance sweeps, portfolio plan accounting, on-line services, ERISA reporting and client training.

Benefit payments, worldwide securities lending, multicurrency accounting, performance measurement/analytics, consulting services and customized STIF are available for additional fees.

Record-keeping services include monthly, quarterly and annual portfolio accounting; on-line transaction and position reports; and m... filcurrency performance.

New features include more short-term investment

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Fees are based on market value, transaction volume, portfolio structure and services required.

The master trust client contact is John Ehrmann; the master custody client contact is William Barron.

Bank One Ohio Trust Co.

Kettering Tower, Dayton, Ohio 45401; (513) 449-4923

	($ millions)
Domestic master trust assets	$549
Tax-exempt	$549
Domestic master custodial	$109
Tax-exempt	$109
Domestic master trust clients	17
Domestic master custodial clients	7
Account supervisors	3
Reports available on-line:	
Monthly transaction	
Asset & liability	

Bank One Ohio Trust Co. N.A. reported $20 million in new, tax-exempt domestic master custodial business in the year ended June 30.

The primary accounting method is full accrual. Cash accounting also is offered.

Services offered in the basic master trust/master custodial agreement are monthly or quarterly accounting reports and portfolio reviews.

Performance measurement, securities lending, participant record keeping and benefit disbursements are available for additional fees.

Record-keeping services offered include all types of employee benefit plans, including 403(b) participant record keeping.

Fees are based on a combination of market value, transaction fees and ancillary services.

Robert Blommel is the client contact.

Bank One

111 Monument Circle, Indianapolis, Ind. 46277; (317) 321-8151

	($ millions)
Domestic master trust assets	$649
Tax-exempt	$649
Domestic master custodial	$3,226
Tax-exempt	$132
Taxable	$3,094
Domestic master trust clients	13
Domestic master custodial clients:	
Tax-exempt	3
Taxable	6

Bank One reported new, tax-exempt domestic master trust business of $146 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $41 million.

The primary accounting method is cash with income accrual.

Services offered in the basic master trust/master custodial agreement are collection of dividends and income, periodic reporting, cash and asset transactions, annual reporting on employee benefit accounts, consolidated statements and performance calculation.

Benefit payments, 1099R production and participant loan processing are available for additional fees.

Fees are based on market value.

Phillip E. Chambers is the client contact.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017; (212) 454-2240

	($ millions)
Domestic master trust assets	$205,358
Tax-exempt	$205,200
Taxable	$158
Domestic master custodial	$98,491
Tax-exempt	$97,700
Taxable	$791
Domestic master trust clients:	
Tax-exempt	369
Taxable	2
Domestic master custodial clients:	
Tax-exempt	113
Taxable	6
Account supervisors	191
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Bankers Trust reported new, tax-exempt domestic master trust business of $3.1 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $18.3 billion.

The primary accounting method is fully accrued settlement date. Average cost, tax lot, FIFO, LIFO and high cost/low cost also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, full accrual accounting and reporting, plan accounting, income collection, cash management, security trade processing, investment manager liaison and legal and regulatory updates.

Domestic and international securities lending, global custody, performance measurement and analytics, on-line PC access, customized graphics, benefit payments, proxy voting, investment management, actively managed STIFs, discount brokerage, consulting, dividend reinvestment, trade execution monitoring and participant record keeping are available for additional fees.

Record-keeping services offered include participant service center; on-line plan sponsor inquiry and transaction system; automated and customized voice response system; full loan administration; tax calculations; transfer and reallocations between funds; forfeiture processing; unit, share and cash accounting; daily, weekly, monthly, quarterly and annual valuations; and employee communications.

New features include Proxy Report, in which managers report their votes into a system that generates reports for the plan sponsor; BT-LINK, a PC-based system for pension payment processing; and an endowment donor accounting system.

The master trust client contact is Jessica Wall; the master custody client contact is Robert Betz.

Barnett Banks Trust Co.

9000 Southside Blvd., Jacksonville, Fla. 32256; (904) 464-2343

	($ millions)
Domestic master custodial	$200
Tax-exempt	$200
Domestic master custodial clients	2
Account supervisors	2

Barnett Banks Trust Co. reported new, tax-exempt domestic master custodial business of $70 million.

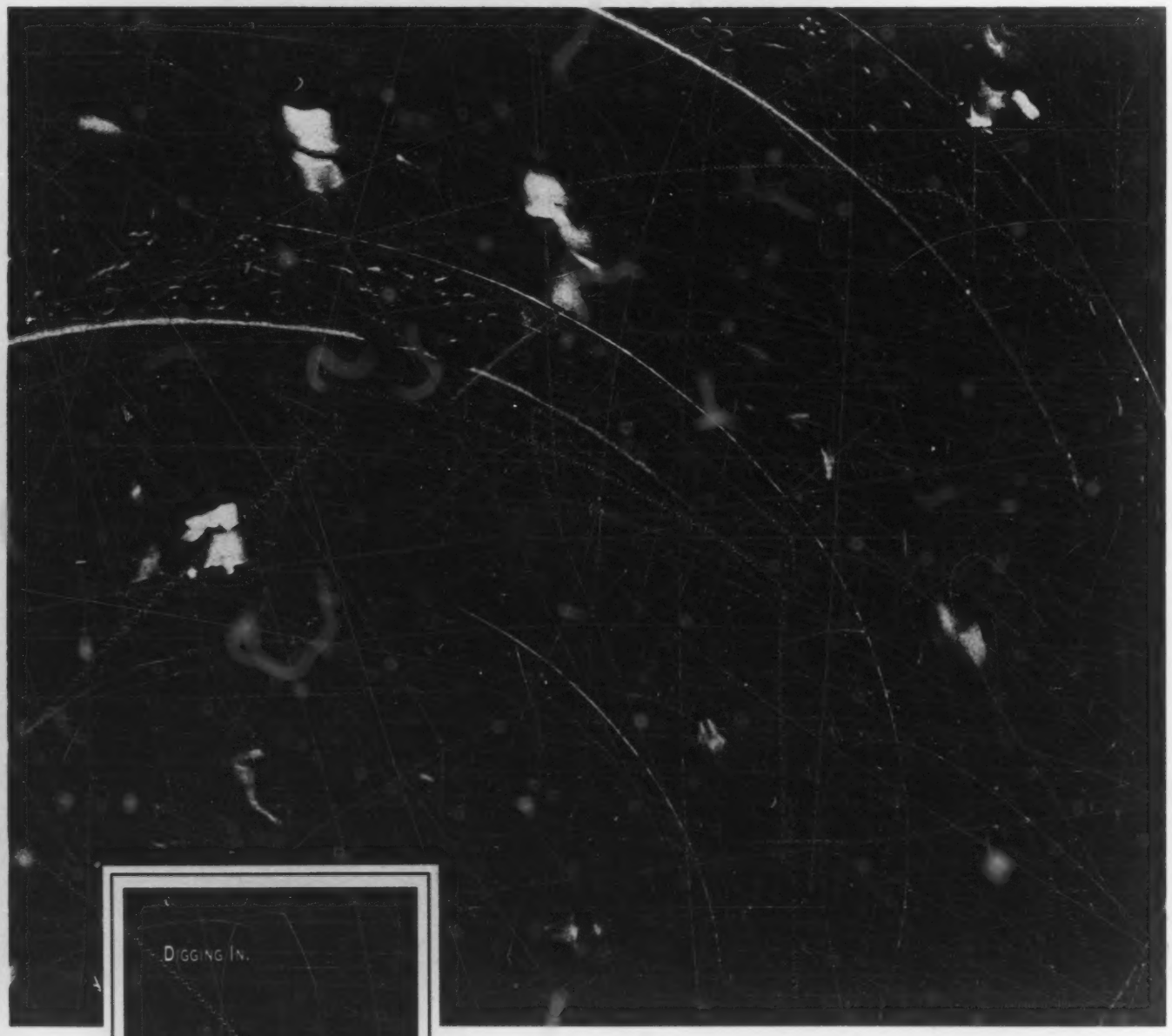
The primary accounting method is accrual.

Services offered in the basic master custodial agreement are basic reporting and roll-up asset statements. Participant record keeping for defined contribution plans is available.

Fees are based on asset size and transaction volume.

The client contact is Robert Bartkowiak.

Investment management consultants will be profiled in the Nov. 11 issue of *P&I*.



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BayBanks

7 New England Executive Park, Burlington, Mass. 01803; (617) 229-4589

	($ millions)
Domestic master trust assets	$253
Tax-exempt	$253
Domestic master custodial	$732
Tax-exempt	$732
Domestic master trust clients	55
Domestic master custodial clients	12
Account supervisors	2
Reports available on-line:	
Monthly transaction	
Asset & liability	

BayBanks reported new, tax-exempt domestic master trust business of $25 million in the year ended June 30.

The primary accounting method is accrual. Cash accounting also is offered.

Services offered in the basic master trust/master custodial agreement are capital actions, income collection and trade settlement.

Pension payment processing is available for additional fees.

Record-keeping services offered include participant accounting, 401(k) and profit sharing.

Fees are based on market value of assets.

Eugene D. Mahoney is the client contact.

Boatmen's Trust Co.

100 N. Broadway, St. Louis, Mo. 63102; (314) 466-3800

	($ millions)
Domestic master trust assets	$2,744
Tax-exempt	$2,744
Domestic master custodial	$19,254
Tax-exempt	$19,254
Domestic master trust clients	18
Domestic master custodial clients	76
Account supervisors	22
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Boatmen's Trust Co. reported new, tax-exempt domestic master trust business of $270 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $727 million.

The primary accounting method is trade date accounting, with fully accrued asset positions. Settlement date also is offered.

Services offered in the basic master trust/master custodial agreement are administration, trade settlement, income collection, daily pricing, tax lot accounting and automated cash sweeps.

Global custody, securities lending, on-line accounting, performance measurement, cash management, pooled funds and standard portfolios, benefit payments and participant record keeping are available for additional fees.

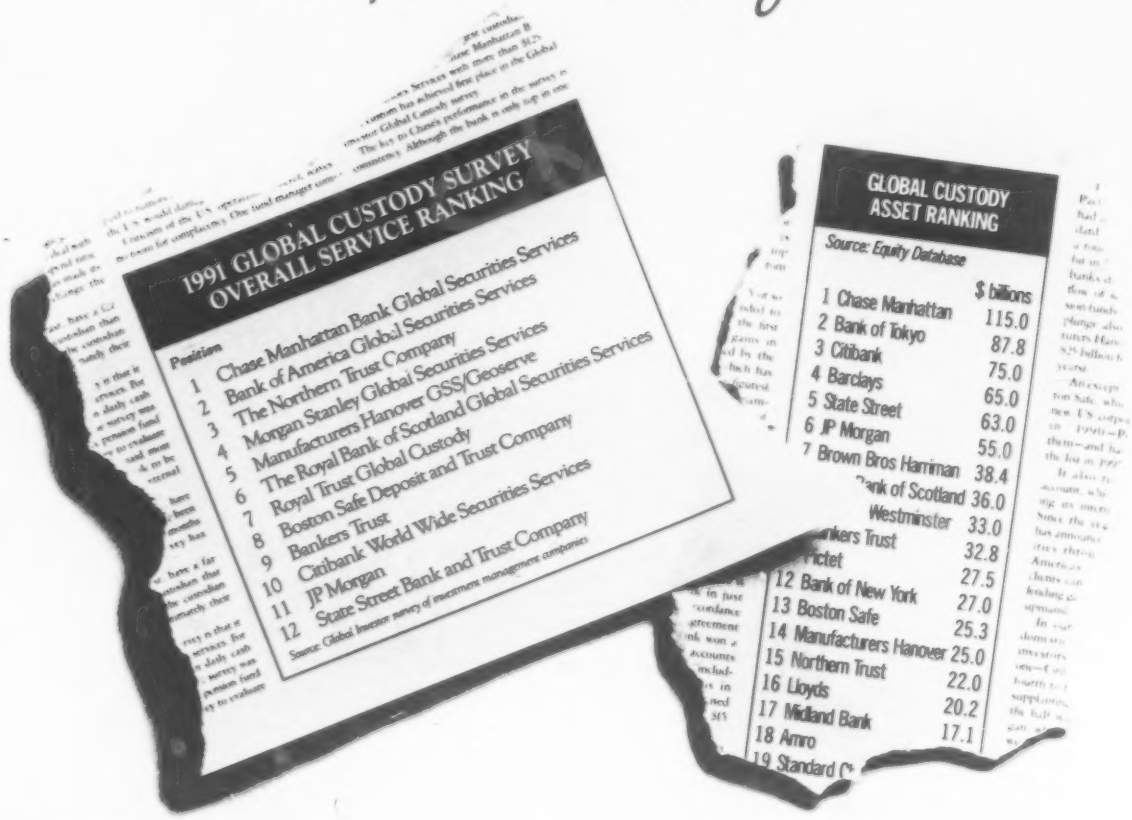
Record-keeping services offered include real estate custody, equitable share accounting and global custody.

New features include DOL supplemental report, on-line performance measurement, customized/enhanced STIF and expanded securities lending.

Fees are based on the number of investment managers, number and type of transactions and the market value of assets.

Richard W. Hibbs is the client contact.

Our Global Custody business has taken us around the world. Our clients have put us on top of it.



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Our clients have given us special acknowledgement for our reporting and market knowledge, and for helping them monitor and manage their investments. They have also recognized us for our performance measurement, foreign exchange and tax consulting services.

We hope this mutually beneficial relationship continues far into the future. After all, experience has taught us that staying on top of our clients' needs is the only way we'll stay on top of the global custody rankings. And that's a place we intend to stay for a long, long time.

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Boston Safe Deposit and Trust Co.

1 Boston Place, Boston, Mass. 02108; (617) 722-7000

	($ millions)
Domestic master trust assets	$56,775
Tax-exempt	$56,200
Taxable	$575
Domestic master custodial	$113,325
Tax-exempt	$112,625
Taxable	$700
Domestic master trust clients:	
Tax-exempt	59
Taxable	11
Domestic master custodial clients:	
Tax-exempt	42
Taxable	2
Account supervisors	33
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Boston Safe Deposit and Trust Co. reported new, tax-exempt domestic master trust business of $1.9 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $1.3 billion.

The primary accounting method is trade date, full accrual. FIFO, LIFO and original cost also are offered.

Services offered in the basic master trust/master custodial agreement are cash management, trade settlement, accounting and reporting.

Performance measurement and analysis, securities lending, on-line information delivery, benefit payments, global custody and participant record-keeping are available for additional fees.

Record-keeping services offered include securities lending, benefit payments and global custody.

New features include an asset-backed security processing system and real estate mortgage system.

Fees are based on portfolio charges, market value, transaction volume and ancillary services provided.

Paul S. Maregni is the client contact.

The Chase Manhattan Bank

1211 Sixth Ave., New York, N.Y. 10036; (212) 789-4118

	($ millions)
Domestic master trust assets	$79,300
Tax-exempt	$79,300
Domestic master custodial	$378,500
Tax-exempt	$81,100
Taxable	$297,400
Domestic master trust clients	130
Domestic master custodial clients:	
Tax-exempt	49
Taxable	233
Account supervisors	31
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

The Chase Manhattan Bank N.A. reported new, tax-exempt domestic master trust business of $16.6 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $400 million.

The primary accounting method is fully accrued, trade date, contractual. Cash, settlement date, amortized, tax lot and plan accounting also are offered.

Services offered in the basic master trust/master custodial agreement are global asset safekeeping, transaction processing, income collection, corporate action and proxy notification, legal consulting, accounting, hard copy reporting, integrated on-line report access, raw data download, reportwriter, investment adviser liaison, cash sweep to zero, cash management and client systems training.

Securities lending, benefit payments, global cus-

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tody, performance measurement consulting, tax lot accounting/reporting, bond amortization/accretion, customized reporting and participant record keeping are available for additional fees.

Record-keeping services offered include multicurrency reporting, tax lot reporting, securities lending reporting, benefits payments reporting and transfer agent.

New features include an international proxy voting service, further integration of on-line assess and expansion of securities lending.

Fees are based on market value, transaction type and volume and portfolio type and volume.

Peter Derrenbacker is the client contact.

Chemical Banking Corp.

55 Water St., New York, N.Y. 10041; (212) 820-5000

	($ millions)
Domestic master trust assets	$5,096
Tax-exempt	$5,096
Domestic master custodial	$34,156
Tax-exempt	$24,603
Taxable	$9,553
Domestic master trust clients	92
Domestic master custodial clients:	
Tax-exempt	124
Taxable	28
Account supervisors	19

Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Chemical Banking Corp. reported new, tax-exempt domestic master trust business of $97 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $486 million.

The primary accounting method is fully accrued, trade date.

Cash and settlement date, LIFO, FIFO, high/low cost accounting also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, transaction processing, transaction processing, settlement, income collection, corporate action notification and proxy processing, accounting, reporting, performance measurement, benefit disbursements, daily automatic sweep, account administration and investment manager liaison.

Electronic access, domestic and international securities lending and global custody are available for additional fees.

New features include two sweep vehicles, annual ERISA report format and 5500 worksheet and electronic access to global corporate actions.

Fees are based on a combination of transactions, custody, specific reporting requirements and relationship complexity.

Ken Montgomery is the client contact.

Citibank

111 Wall St., New York, N.Y. 10043; (212) 657-5297

	($ millions)
Domestic master trust assets	$30,751
Tax-exempt	$30,751
Domestic master custodial	$350,260
Tax-exempt	$96,260
Taxable	$254,000
Domestic master trust clients	197
Domestic master custodial clients:	
Tax-exempt	112
Taxable	358
Account supervisors	72

Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Citibank N.A. offers full accrual, true trade date accounting. Settlement date and cash basis accounting also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping and custody, cash management, trade date reporting, equitable share accounting and on-line information management. Investment performance evaluation, global custody, securities lending, DRIP services, participant record keeping and flexible reporting are available for additional fees.

Record-keeping services offered include a voice response system.

New features include complete back-office services for investment managers, including portfolio record keeping and management; global master trust for multinational corporations; and CPU to CPU link for large money managers.

Fees are based on individual services provided.

Kenneth A. Hines Jr. is the client contact.

Commerce Bank

922 Walnut, P.O. Box 419248, Kansas City, Mo. 64141-6248; (816) 234-2000

	($ millions)
Domestic master trust assets	$369
Tax-exempt	$369
Domestic master custodial	$6
Tax-exempt	$6
Domestic master trust clients	5
Domestic master custodial clients	2
Account supervisors	3

Commerce Bank reported new, tax-exempt domestic master custodial business as of June 30 of $1.9 million.

The primary accounting method is accrual.

Services offered in the basic master trust/master custodial agreement are monthly evaluation and general administrative responsibilities. Investment management of funds is available for additional fees.

Fees are negotiable.

Craig Huntley and Robert Kalinich are the client contacts.

Continental Bank

231 S. LaSalle St., Chicago, Ill. 60697; (312) 828-3503

	($ millions)
Domestic master trust assets	$14,532
Tax-exempt	$14,532
Domestic master custodial	$87,793
Tax-exempt	$6,077
Taxable	$81,716
Domestic master trust clients	154
Domestic master custodial clients:	
Tax-exempt	20
Taxable	69
Account supervisors	18

Reports available on-line:
Monthly transaction
Asset & liability

Continental Bank N.A. reported new, tax-exempt domestic master trust business of $320 million in the year ended June 30.

The primary accounting method is accrual/trade date. Cash/settlement date also is offered.

Services offered in the basic master trust/master custodial agreement are trust accounting and reporting, plan accounting, automated cash management, custody, trade settlement, income collection and on-line access.

Domestic and international lending, global custody, performance measurement and analysis, brokers commission and trade audit reports, pension disbursement, self-insurance trust administration, investment management and GIC fund are available for additional fees.

Record-keeping services offered include customized reporting.

New features include a securities processing system, customized reporting and a performance measurement system.

Fees are based on market value and transaction charges.

The master trust client contact is Christopher S. Ross; the master custody client contact is Michael Hannay.

CoreStates Bank

P.O. Box 7558, Philadelphia, Pa. 19101-7558; (215) 786-8033

	($ millions)
Domestic master trust assets	$3,712
Tax-exempt	$3,712
Domestic master custodial	$40,847
Tax-exempt	$35,034
Taxable	$5,813
Domestic master trust clients	22
Domestic master custodial clients:	
Tax-exempt	14
Taxable	8
Account supervisors	20

Reports available on-line:

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Monthly transaction
Asset & liability
Performance measurement

CoreStates Bank N.A. reported new, tax-exempt domestic master trust business of $218 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $2.758 billion.

The primary accounting method is settlement date. Accrual trade-date adjusted accounting also is offered.

Services offered in the basic master trust/master custodial agreement are asset administration, cash basis accounting, and accrual accounting.

Performance measurement, performance comparison (TUCS), client terminal, securities lending, index fund management, global custody, fixed-income and equity management, and corporate actions automated notification and processing are available for additional fees.

Record-keeping services offered include participant record keeping, perision payroll and proxy voting service.

New features include private placement processing and Trust Management System for report writing.

Fees are transaction- and asset-based.

The master trust client contact is Ed Keidat; the master custody client contact is Jerry Hayes.

C&S/Sovran Trust Co.

33 North Ave., 9th Floor, Atlanta, Ga. 30308; (404) 897-3095

	($ millions)
Domestic master trust assets	$10,019
Tax-exempt	$9,627
Taxable	$392
Domestic master custodial	$20,[illegible]
Tax-exempt	$18,[illegible]
Taxable	$1,863
Domestic master trust clients:	
Tax-exempt	37
Taxable	5
Domestic master custodial clients:	
Tax-exempt	24
Taxable	15
Account supervisors	14
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

C&S/Sovran Trust Co. reported new, tax-exempt domestic master trust business of $640 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $1.02 billion.

The primary accounting method is trade date/full accrual. Settlement date, partial accrual, non-accrual and dual cash accounting also are offered.

Services offered in the basic master trust/master custodial agreement are financial accounting, transaction settlement and securities custody. Portfolio evaluation, participant record keeping, ERISA disclosure, investment management and benefit disbursement are available for additional fees.

Fees are based on a percentage of assets, plus transaction fees.

Roger Birkholz is the client contact.

First Interstate Bank Ltd.

707 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 614-2291

	($ millions)
Domestic master trust assets	$13,314
Tax-exempt	$12,314
Taxable	$1,000
Domestic master custodial	$20,000
Tax-exempt	$3,000
Taxable	$17,000
Domestic master trust clients:	
Tax-exempt	105
Taxable	15
Domestic master custodial clients:	
Tax-exempt	15
Taxable	200
Account supervisors	23
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

First Interstate Bank Ltd. reported new, tax-exempt domestic master trust business of $2.5 billion in the year ended June 30.

The primary accounting method is settlement date. Trade date, tax lot and unitized accounting also are offered.

Services offered in the basic master trust/master custodial agreement are settlement of securities, income collection, investment of idle cash, safekeeping, receipt of funds and disbursements.

On-line real time access, customized reporting, performance measurement, securities lending, portfolio analytics and global securities processing are available for additional fees.

New features include daily stock record for securities domiciled, an enhanced customized reporting system and enhanced trade-order entry.

Fees are based on market value, plus transaction fees.

Deborah Dilley is the client contact.

First Interstate Bank of Washington

999 Third Ave., Seattle, Wash. 98104; (206) 292-3522

	($ millions)
Domestic master trust assets	$206
Tax-exempt	$206
Domestic master trust clients	1
Account supervisors	1

First Interstate Bank of Washington N.A. offers cash as the primary accounting method used.

Services offered in the basic master trust/master custodial agreement are unit accounting and asset roll-up reporting.

Fees are asset-based.

Lawrence T. Divers is the client contact.

The First National Bank of Maryland

25 S. Charles St., Baltimore, Md. 21201; (301) 244-4542

	($ millions)
Domestic master trust assets	$353
Tax-exempt	$333
Taxable	$20
Domestic master custodial	$13,600
Tax-exempt	$11,500
Taxable	$2,100
Domestic master trust clients:	
Tax-exempt	9
Taxable	1
Domestic master custodial clients:	
Tax-exempt	5
Taxable	3
Account supervisors	20
Reports available on-line:	
Monthly transaction	
Asset & liability	

The First National Bank of Maryland reported new, tax-exempt domestic master trust business of $58 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $1.7 billion.

The primary accounting methods are cash or accrual. Trade date and settlement date also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, income collection, cash sweep, monthly reporting, plan accounting and on-line access. Pension payment, performance measurement and unit accounting are available for additional fees.

Record-keeping services offered include participant record keeping.

New features include trade order entry and regulatory updates.

Fees are based on a fixed price or market value fee plus settlement and payment activity.

Joseph Baker is the client contact.

First Trust National Association

180 E. Fifth St., St. Paul, Minn. 55101; (612) 223-7000

	($ millions)
Domestic master trust assets	$5,399
Tax-exempt	$5,399
Domestic master custodial	$2,097
Tax-exempt	$1,910
Taxable	$187
Domestic master trust clients	28
Domestic master custodial clients:	
Tax-exempt	14
Taxable	3
Account supervisors	7

Overall ranking of master trust/custody banks by investment advisers*

	Average rating	Votes
Continental Bank	4.17	30
Northern Trust	4.12	102
Harris Trust	4.10	59
NBD	4.08	25
Wilmington Trust	4.06	16
Wachovia	4.03	38
Mellon Bank	3.97	70
Manufacturers Bank	3.94	16
U. S. Trust	3.94	32
Ameritrust	3.87	23
Bankers Trust	3.81	90
Boatmen's Trust	3.79	24
LaSalle Nat'l	3.75	20
Bank of New York	3.73	62
State Street	3.72	92
SunTrust Banks	3.71	7
Security Pacific	3.70	40
Bank of America	3.62	21
Mercantile Safe	3.57	30
First Interstate/Calif.	3.57	23
Boston Safe	3.56	80
Chase Manhattan	3.53	81
Manufacturers Hanover	3.49	49
J.P. Morgan	3.41	17
Chemical Bank	3.40	20
CoreStates	3.31	16
First Trust	3.29	17
Citibank	3.06	52
C&S/Sovran	3.05	21
Mitsubishi	3.00	8

*only banks with more than $1 billion in tax-exempt master trust/custody and global custody assets were rated by advisers

JOHN J. BORHOQUEZ

Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

First Trust National Association reported new, tax-exempt domestic master trust business of $355 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $79 million.

The primary accounting method is trade date/full accrual. Settlement date also is offered.

Services offered in the basic master trust/master custodial agreement are custodial services, trade date reporting, investment performance review, ERISA disclosure assistance, benefit disbursement and daily cash sweep.

Participant record keeping, individual investment management, GIC fund, global custody, dial-up, securities lending and an enhanced performance measurement are available for additional fees.

Record-keeping services offered include participant record keeping.

New features include an enhanced performance measurement system, an expanded global custody network and real-time inquiry.

Fees are calculated using a basis point charge plus transaction charges.

David F. Bodine is the client contact.

Post-1992 Europe: Oct. 28.

First Wisconsin Trust Co.

P.O. Box 2054, Milwaukee, Wis. 53201; (414) 765-4444

	($ millions)
Domestic master trust assets	$2,724
Tax-exempt	$2,724
Domestic master custodial	$10,908
Tax-exempt	$2,065
Taxable	$8,843
Domestic master trust clients	31
Domestic master custodial clients:	
Tax-exempt	4
Taxable	34
Account supervisors	2
Reports available on-line:	
Monthly transaction	
Asset & liability	

First Wisconsin Trust Co. offers fully accrued, trade-date adjusted accounting as the primary accounting method.

Services offered in the basic master trust/master custodial agreement are plan accounting (both dollar and unitized), care and custody of assets, transaction processing, cash management, consolidated and individual investment reviews and securities lending. On-line access, relative and absolute performance measurement, benefit payments and participant record keeping are available for additional fees.

Record-keeping services offered include participant record keeping for defined contribution plans.

Fees are based on assets and transactions.

Robert J. Aubrecht is the client contact.

Fleet/Norstar

100 Westminster St., Providence, R.I. 02903; (401) 278-3318

	($ millions)
Domestic master trust assets	$3,059
Tax-exempt	$3,059
Domestic master custodial	$742
Tax-exempt	$742
Domestic master trust clients	42
Domestic master custodial clients	21
Account supervisors	18
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Fleet/Norstar reported new, tax-exempt domestic master trust business of $113 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $28 million.

The primary accounting method is cash.

Fees are based on assets, transactions and base fees.

Marshall Raucci Jr. is the client contact.

Harris Trust & Savings Bank

111 W. Monroe St., Chicago, Ill. 60603; (312) 461-2121

	($ millions)
Domestic master trust assets	$45,300
Tax-exempt	$45,300
Domestic master custodial	$37,800
Tax-exempt	$9,000
Taxable	$28,800
Domestic master trust clients	80
Domestic master custodial clients:	
Tax-exempt	6
Taxable	151
Account supervisors	14
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Harris Trust & Savings Bank reported new, tax-exempt domestic master trust business of $983 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $406 million.

The primary accounting method is accrual/trade date. Cash/settlement date also is offered.

Services offered in the basic master trust/master custodial agreement are custody, safekeeping, securities clearance, income collection, cash management, accounting and reporting.

Global custody, benefit disbursements, securities lending, performance measurement, universe comparison, portfolio analysis and consulting, participant record keeping, on-line access with data download and graphics, custom cash management, custom reporting and systematic investment management are available for additional fees.

Record-keeping services offered include customized performance benchmarks.

New features include enhanced reporting and global settlement through Harris' own global custody network.

Fees are based on market value, transactions and individual services.

Ross Lundstrom and Sarah Luthy are master trust client contacts; the master custody client contact is Maureen Waldron.

Hibernia National Bank

P.O. Box 61540, New Orleans, La. 70161; (504) 580-5542

Domestic master trust assets	$356
Tax-exempt	$356
Domestic master custodial	$1,955
Tax-exempt	$1,123
Taxable	$832
Domestic master trust clients	14
Domestic master custodial clients:	
Tax-exempt	9
Taxable	1
Account supervisors	9
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Hibernia National Bank reported new, tax-exempt domestic master trust business of $16 million in the year ended June 30.

The primary accounting method is accrual.

Master trust/custody client agreements are customized. On-line access to individual account information, benefit payments and participant record keeping are available for additional fees.

Record-keeping services offered include participant record keeping.

Fees are based on the market value of assets.

William J. Kearney III is the client contact.

LaSalle National Trust

135 S. LaSalle St., Chicago, Ill. 60603; (312) 443-2300

	($ millions)
Domestic master trust assets	$1,512
Tax-exempt	$1,512
Domestic master custodial	$7,700
Tax-exempt	$7,700
Domestic master trust clients	15
Domestic master custodial clients	354
Account supervisors	11
Reports available on-line:	
Monthly transaction	
Asset & liability	

LaSalle National Trust N.A. reported new, tax-exempt domestic master trust business of $225 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $94 million.

The primary accounting method is cash. Accrual also is offered.

Services offered in the basic master trust/master custodial agreement are account statements, cash management, benefits disbursements and securities safekeeping. Participant record keeping and loan payment are available for additional fees.

Fees are calculated on a base charge, plus a percentage of assets.

Robert D. Meiresonne is the client contact.

Manufacturers Bank

411 W. Lafayette, Detroit, Mich. 48226; (313) 222-5414

	($ millions)
Domestic master trust assets	$20,255
Tax-exempt	$20,255
Domestic master custodial	$7,391
Tax-exempt	$5,021
Taxable	$2,370
Domestic master trust clients	22
Domestic master custodial clients:	
Tax-exempt	50
Taxable	4
Account supervisors	10
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Manufacturers Bank N.A. reported new, tax-exempt domestic master trust business of $56 million in the year ended June 30.

The primary accounting method is trade date, fully accrued. Settlement date is also offered.

Services offered in the basic master trust/master custodial agreement are trusteeship, custody, settlement, income collection, corporate action processing, cash management, reporting and plan accounting.

Performance measurement, TUCS, performance consulting, benefit payments, securities lending, global custody, stock and bond index funds, investment management, downloading and on-line reporting are available for additional fees.

Record-keeping services offered include participant record keeping for defined contribution plans, including participant loan processing and lump-sum distributions.

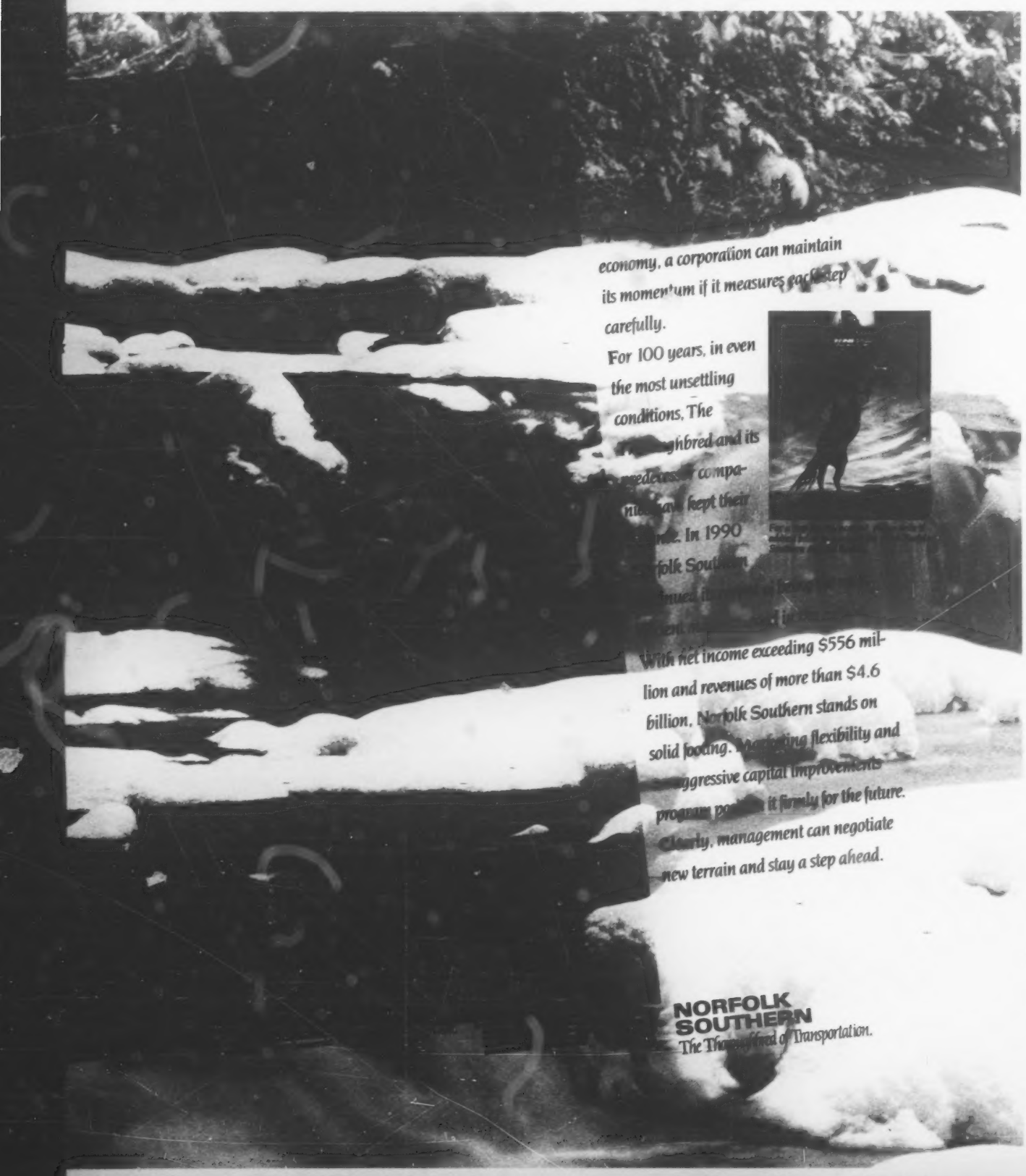
Fees are based on asset value, transactions and holdings.

Larry Rankens is the client contact.

Manufacturers Hanover

270 Park Ave., New York, N.Y. 10017; (212) 613-7950

	($ millions)
Domestic master trust assets	$28,000



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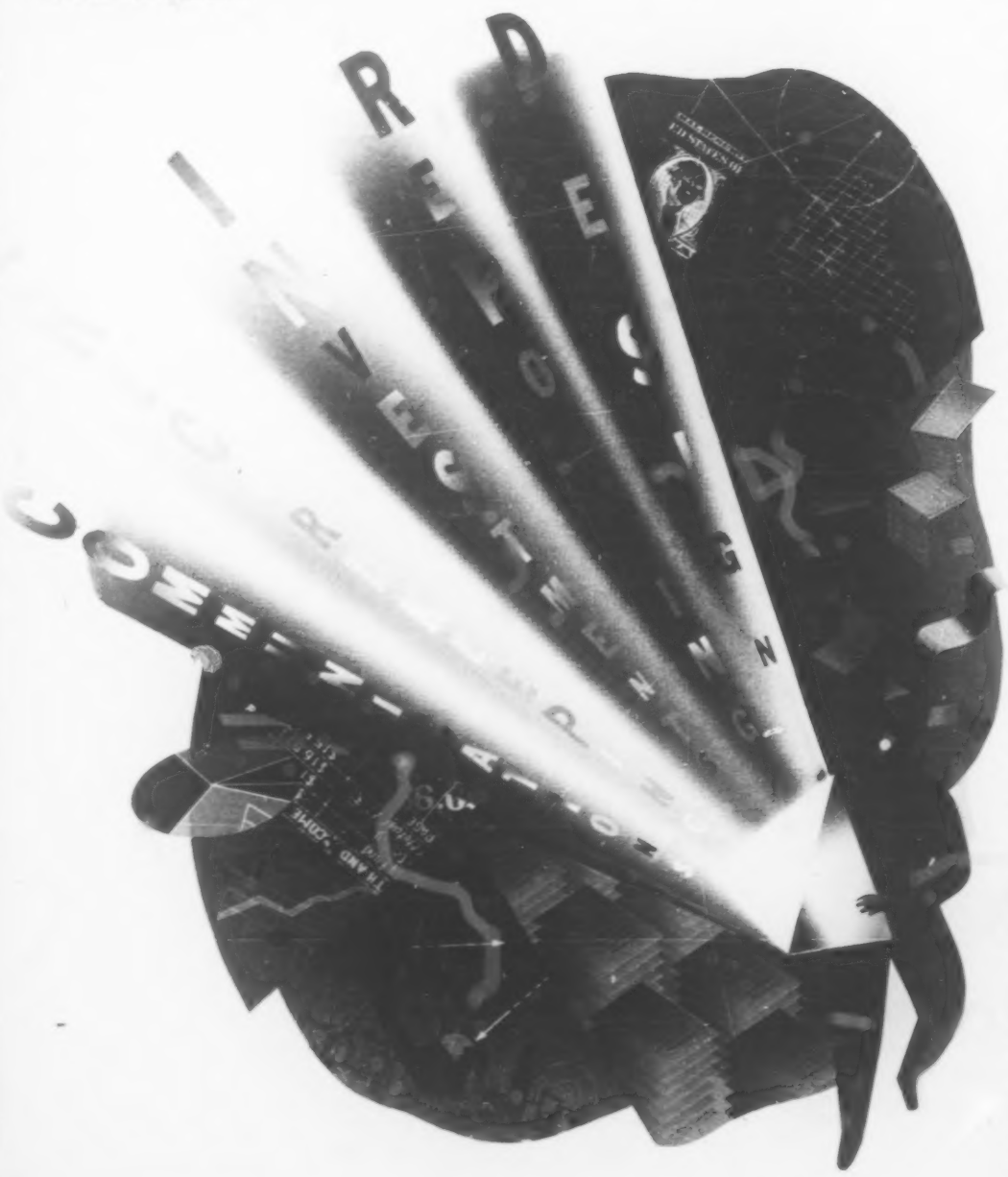

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Tax-exempt	$25,500
Taxable	$2,500
Domestic master custodial	$43,000
Tax-exempt	$2,200
Taxable	$40,800
Domestic master trust clients:	
Tax-exempt	112
Taxable	10
Domestic master custodial clients:	
Tax-exempt	11
Taxable	315
Account supervisors	24
Reports available on-line:	
Asset & liability	
Performance measurement	

[illegible]facturers Hanover reported new, tax-exempt domestic master custody business of $500 million in the year ended June 30.

The primary accounting method is trade date. Settlement date also is offered.

Services offered in the basic master trust/master custodial agreement are trusteeship, administration, custody and reporting.

Performance measurement, participant record keeping, benefit payments, plan accounting and commingled funds are available for additional fees.

Record-keeping services offered include participant record keeping.

New features include enhanced multicurrency reporting and enhanced on-line GEOPAC.

Fees are based on asset value and transaction volume.

Greg di Pretoro is the client contact.

Marine Midland Bank

250 Park Ave., New York, N.Y. 10177; (212) 503-2724

	($ millions)
Domestic master trust assets	$2,000
Tax-exempt	$2,000
Domestic master custodial	$1,800
Tax-exempt	$1,000
Taxable	$800
Domestic master trust clients	40
Domestic master custodial clients:	
Tax-exempt	6
Taxable	10
Account supervisors	10
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Marine Midland Bank N.A. reported new, tax-exempt domestic master trust business of $100 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $200 million.

The primary accounting method is trade date. Settlement date also is offered.

In addition to basic master trust/custody services, performance measurement, participant record keeping, benefit payments, investment management and securities lending are available for additional fees.

Fees are based on asset value and complexity of the account.

Moira Patterson is the client contact.

Marshall & Ilsley Trust Co.

770 N. Water St., Milwaukee, Wis. 53202; (414) 287-7187

Domestic master trust assets	$1,637
Tax-exempt	$1,637
Domestic master custodial	$4,000
Tax-exempt	$2,000
Taxable	$2,000
Domestic master trust clients	47
Domestic master custodial clients:	
Tax-exempt	8
Taxable	3
Account supervisors	8
Reports available on-line:	
Monthly transaction	
Asset & liability	

Marshall & Ilsley Trust Co. reported new, tax-exempt domestic master trust business of $300 million in the year ended June 30.

The primary accounting method is accrual.

Services offered in the basic master trust/master custodial agreement are performance measurement, ERISA disclosure, benefit disbursement, investment management and participant record keeping. On-line access and data downloading are available for additional fees.

Fees are based on asset value and individual services.

Morry L. Birnbaum is the client contact.

Mellon Bank

1 Mellon Bank Center, Suite 3325, Pittsburgh, Pa. 15258; (412) 234-1336

	($ millions)
Domestic master trust assets	$131,585
Tax-exempt	$129,334
Taxable	$2,251
Domestic master custodial	$52,577
Tax-exempt	$22,425
Taxable	$30,152
Domestic master trust clients:	
Tax-exempt	160
Taxable	13
Domestic master custodial clients:	
Tax-exempt	41
Taxable	65
Account supervisors	35
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Mellon Bank reported new, tax-exempt domestic master trust business of $3.4 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $5.2 billion.

The primary accounting method is trade date, fully accrued. Cash accounting also is offered.

Services offered in the basic master trust/master custodial agreement include conversion, administration, automated cash sweep, cash management, accounting and reporting. Security lending, global custody, participant record keeping, benefit disbursements, performance measurement, options and futures and on-line services are available for additional fees.

New features include employee communications and consulting for defined contribution plans.

Fees are based on a base charge, asset value charge and transaction charges.

Timothy F. Keaney is the client contact.

Mercantile Bank of St. Louis

P.O. Box 387, St. Louis, Mo. 63166-0524; (314) 425-2613

	($ millions)
Domestic master custodial	$80
Tax-exempt	$80
Domestic master custodial clients	1
Account supervisors	2
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Mercantile Bank of St. Louis N.A. reported new,

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IRRC Investor Responsibility Research Center Inc.
David Popper/David Hauck
1755 Massachusetts Ave., N.W.
Suite 600
Washington, DC 20036

tax-exempt domestic master custody business of $80 million in the year ended June 30.

The primary accounting method is cash. EBR income also is offered.

Services offered in the basic master custodial agreement are trade processing, safekeeping, income collection, daily cash management, transaction recording and reporting at cost and market. Record keeping, plan tax forms, prototypes, participant loans, benefit distribution with tax forms, securities lending and unitized accounting are available for additional fees.

Record-keeping services offered include full services for defined contribution plans.

New features include enhanced EDP in retirement plan and cash management.

Fees are calculated on base fee with market value fee, transaction and cash management on services provided.

J. Craig Nelson is the client contact.

Montreal Trust Co. of Canada

15 King St. W., Toronto, Ont. M5H 1B4; (416) 860-5617

	($ millions)
Canadian master trust assets	$7,841
Tax-exempt	$7,841
Canadian master trust clients	76
Account supervisors	10
Reports available on-line:	
Monthly transaction	
Asset & liability	

Montreal Trust Co. of Canada services Canadian clients and provides settlement date as the primary accounting method.

Services offered in the basic master trust/master custodial agreement are trustee/custodial services, safekeeping, production and maintenance of accounting records and regular asset valuation.

Transaction/activity, additional participants, utilization, portfolio accounting, mortgage administration, audit letters, strip coupon custody, benefit payments and dial-up systems are available for additional fees.

New features include enhanced client reports.

Fees are based on average book value.

The client contact is Terry McLeod.

NBD Bank

611 Woodward Ave., Detroit, Mich. 48226; (313) 225-2660

	($ millions)
Domestic master trust assets	$13,630
Tax-exempt	$13,630
Domestic master custodial	$24,826
Tax-exempt	$24,043
Taxable	$783
Domestic master trust clients	147
Domestic master custodial clients:	
Tax-exempt	120
Taxable	16
Account supervisors	13
Reports available on-line:	
Monthly transaction	
Asset & liability	

NBD Bank N.A. reported new, tax-exempt domestic master trust business of $159 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $1.045 billion.

The primary accounting methods are trade date and settlement date.

Services offered in the basic master trust/master custodial agreement are custody, benefit disbursements, cash management, performance measurement, portfolio review, securities lending, global custody, on-line downloading and on-line inquiry capabilities. Participant record keeping and investment management are available for additional fees.

Record-keeping services offered include mutual fund accounting.

New features include enhanced on-line inquiry capabilities.

Fees are based on asset value and transactional analysis.

Jon R. Mittler is the client contact.

NCNB

1 NCNB Plaza T10-10, Charlotte, N.C. 28255; (704) 386-5115

	($ millions)
Domestic master trust assets	$18,808
Tax-exempt	$15,808
Taxable	$3,000
Domestic master custodial	$16,157
Tax-exempt	$13,520
Taxable	$2,637
Domestic master trust clients:	
Tax-exempt	23
Taxable	4
Domestic master custodial clients:	
Tax-exempt	36
Taxable	5
Account supervisors	8
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

NCNB reported new, tax-exempt domestic master custody business of $4.382 billion in the year ended June 30.

The primary accounting method is trade date/full accrual. Settlement date, cash or accrual basis also is offered.

Services offered in the basic master trust/master custodial agreement are client on-line reporting and downloading, on-line DTC securities processing, on-line cash management and forecasting, fail float earnings, accounting reports, global custody, plan accounting and reporting, pre-crediting dividends and interest on payable date in good funds, daily pricing, on-line benefit payments and control disbursement, securities lending, options and futures processing, on-line performance measurement and analytics, TUCS, asset allocation and simulation services, on-line investment manager affirmation, on-line cash management sweep services and on-line institutional custody service.

ESOP and 401(k) administration, government reporting, stock and bond index funds, portfolio risk insurance, GIC wholesale service, dedicated bond portfolio, performance consulting, transition manager service, futures and options, international, real estate and energy investing are available for additional fees.

Record-keeping services offered include individual plan participant record keeping.

New features include improved customer reporting and expanded trade execution capabilities.

Fees are based on a percentage of market value plus transaction fees.

James D. Wehr and F. Huling Poston are client contacts.

The Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 60675; (312) 630-6000

	($ millions)
Domestic master trust assets	$120,783
Tax-exempt	$120,783
Domestic master custodial	$109,590
Tax-exempt	$76,875
Taxable	$32,715
Domestic master trust clients	332

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Domestic master custodial clients:
Tax-exempt 102
Taxable 46
Account supervisors 66
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

The Northern Trust Co. reported new, tax-exempt domestic master trust business of $5.18 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $3.231 billion.

The primary accounting method is settlement date/fully accrued. Trade date, cash basis and tax lot also are offered.

Services offered in the basic master trust/master custodial agreement are custody, trade settlement, daily pricing, income collections, capital change processing and standard reporting. Global custody, securities lending, on-line reporting, performance measurement and analytics, benefits payments, plan accounting, cash management and investment services are available for additional fees.

New features include international performance measurement and analytics, expanded international securities lending, NRA cash management and automated trade capture.

Fees are based on number of investment managers, number and type of transactions and market value of assets.

Thomas W. Kimen is client contact.

Norwest Bank Minnesota

Norwest Center, Sixth & Marquette, Minneapolis, Minn. 55479; (612) 667-0694

	($ millions)
Domestic master trust assets	$3,500
Tax-exempt	$3,500
Domestic master custodial	$4,717
Tax-exempt	$1,537
Taxable	$3,180
Domestic master trust clients	27
Domestic master custodial clients:	
Tax-exempt	60
Taxable	13
Account supervisors	7
Reports available on-line:	
Monthly transaction	
Asset & liability	

Norwest Bank Minnesota N.A. reported new, tax-exempt domestic master trust business of $133 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $201 million.

The primary accounting method is trade date, full accrual. Settlement date also is offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, cash management, trade settlement, income collection, corporate action monitoring, daily pricing, proxy vote reporting, 5500 reporting and securities lending.

Performance measurement, portfolio analytic reporting, on-line access, pension payment services, participant record keeping, investment management, mutual fund accounting, shareholder accounting and global custody are available for additional fees.

Record-keeping services offered include shareholder record keeping.

New features include on-line portfolio information system, enhanced performance analytic reporting and pension hotline.

Fees are based on the number of transactions, accounts and market value of assets.

Jill Johnson is the client contact.

The Riggs National Bank of Washington D.C.

808 17th St. N.W., Washington, D.C. 20074-0315; (202) 835-6883

	($ millions)
Domestic master custodial	$27,400
Tax-exempt	$7,000
Taxable	$20,400
Domestic master custodial clients:	
Tax-exempt	150
Taxable	250
Account supervisors	6
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

The Riggs National Bank of Washington D.C. reported new, tax-exempt domestic master custody business of $300 million in the year ended June 30.

The primary accounting method is cash. Accrual also is offered.

Services offered in the basic master custodial agreement are custody and record keeping, income collection, trade settlement, cash management and securities lending. Performance measurement is available for additional fees.

Fees are based on a combination of transaction fees, base fees and/or basis point fees.

The client contact is Albert L. Behar.

Security Pacific Bank

333 S. Grand Ave., Suite 1740, Los Angeles, Calif. 90071; (213) 229-2999

	($ millions)
Domestic master trust assets	$24,000
Tax-exempt	$22,000
Taxable	$2,000
Domestic master custodial	$246,000
Tax-exempt	$55,000
Taxable	$191,000
Domestic master trust clients:	
Tax-exempt	50
Taxable	10
Domestic master custodial clients:	
Tax-exempt	73
Taxable	345
Account supervisors	100
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Security Pacific Bank reported new, tax-exempt domestic master trust business of $1 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $11 billion.

The primary accounting method is trade date for trust accounts; cash for custody accounts. Settlement date, accrual, average cost, LIFO, FIFO, scientific and amortization/accretion also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, clearing, income collection, capital change notification, cash management, reporting, on-line access and ERISA reports. Report writer, performance measurement, securities lending, electronic funds transfer, global custody, benefit payments and plan share accounting are available for additional fees.

New features include electronic funds transfer.

Fees are based on a combination of asset-based and/or unbundled transaction fees.

Brad Marcus is the client contact.

Security Trust Co.

1501 Pennsylvania Ave. N.W., Washington D.C. 20013; (202) 624-4158

	($ millions)
Domestic master trust assets	$1,681
Tax-exempt	$1,379
Taxable	$302
Domestic master custodial	$4,607
Tax-exempt	$2,851
Taxable	$1,756
Domestic master trust clients:	
Tax-exempt	43
Taxable	10
Domestic master custodial clients:	
Tax-exempt	16
Taxable	18
Account supervisors	22
Reports available on-line:	
Monthly transaction	
Asset & liability	

Security Trust Co. N.A. reported new, tax-exempt domestic master custody business of $452 million in the year ended June 30.

The primary accounting method is settlement date. Accrual/trade date also is offered.

Services offered in the basic master trust/master custodial agreement are record keeping, trusteeship, safekeeping and settlement, investment management, cash management, monthly asset and transaction reporting and 5500 reporting format.

Consulting, plan documentation services, employee communications, administrative procedure review, performance measurement, special report formats and benefit payments are available for additional fees.

Record-keeping services offered include participant record keeping.

Fees are based on market value of assets plus transaction charges. Ancillary fees are billed as contracted.

Lisa W. MacInnes is master trust client contact; Kathy A. Jackson and Judy K. McCoy are master custody client contacts.

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GLOBAL CUSTODY SERVICES
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Signet Trust Co.

7 N. Eighth St., Richmond, Va. 23219; (804) 771-7156

	($ millions)
Domestic master trust assets	$497
Tax-exempt	$497
Domestic master trust clients	6
Account supervisors	3
Reports available on-line:	
Monthly transaction	
Asset & liability	

Signet Trust Co. reported new, tax-exempt domestic master trust business of $37 million in the year ended June 30.

The primary accounting method is settlement date. Trade date also is offered.

Services offered in the basic master trust agreement are safekeeping, trade settlement, cash sweep, short-term investments, securities lending, global capability, income collection, reporting and performance reporting. On-line access is available for additional fees.

Record-keeping services offered include defined contribution participant record keeping, including daily valuation.

Fees are based on market value, transactions and holdings.

Peggy Harding is the client contact.

State Street Bank and Trust

P.O. Box 1992, Boston, Mass. 02105-1992; (617) 847-2511

	($ millions)
Domestic master trust assets	$149,336
Tax-exempt	$143,266
Taxable	$6,070
Domestic master custodial	$186,074
Tax-exempt	$171,963
Taxable	$14,111
Domestic master trust clients:	
Tax-exempt	222
Taxable	1
Domestic master custodial clients:	
Tax-exempt	113
Taxable	6
Account supervisors	57
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

State Street Bank and Trust Co. reported new, tax-exempt domestic master trust business of $6.484 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $13.308 billion.

The primary accounting method is trade date, full accrual. Tax lot, LIFO and FIFO also are offered.

Services offered in the basic master trust/master custodial agreement are trusteeship, safekeeping, cash management, trade settlement, income collection, corporate action monitoring, daily/weekly/monthly valuation, fiduciary control and on-line access.

Global custody, global asset allocation, domestic and international index funds, performance measurement and analytics, securities lending and dividend reinvestment are available for additional fees.

Record-keeping services offered include participant record keeping, plan accounting, mutual fund accounting and insurance reporting.

New features include 24-hour securities lending, enhanced money market funds, 5500 reporting with new ERISA cost and assistance with organization-sponsored mutual funds.

Fees are based on asset value, transaction and per portfolio charges.

Frank D. Antin is the client contact.

SunTrust Banks Inc.

25 Park Place, Atlanta, Ga. 30303; (404) 588-8636

	($ millions)
Domestic master trust assets	$2,331
Tax-exempt	$2,331
Domestic master custodial	$2,222
Tax-exempt	$1,734
Taxable	$488
Domestic master trust clients	14
Domestic master custodial clients:	
Tax-exempt	10
Taxable	4
Account supervisors	3
Reports available on-line:	
Monthly transaction	
Asset & liability	

SunTrust Banks Inc. reported new, tax-exempt domestic master custody business of $6 million in the year ended June 30.

The primary accounting method is trade date, full accrual. Cash, tax lot, settlement date, book value and other variations also are offered.

In addition to basic master trust custody services, global custody, investment performance measurement, securities lending and on-line access are available for additional fees.

Record-keeping services offered include participant record keeping.

Fees are based on market value of assets.

James F. Winters III is the client contact.

U.S. Trust Co. of New York

114 W. 47th St., New York, N.Y. 10036-1532; (212) 852-1000

	($ millions)
Domestic master trust assets	$70,300
Tax-exempt	$19,300
Taxable	$51,000
Domestic master custodial	$172,700
Tax-exempt	$6,700
Taxable	$166,000
Domestic master trust clients:	
Tax-exempt	121
Taxable	28
Domestic master custodial clients:	
Tax-exempt	54
Taxable	137
Account supervisors	28
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

U.S. Trust Co. of New York reported new, tax-exempt domestic master trust business of $3.3 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $1.34 billion.

The primary accounting methods are trade date, contractual settlement and actual settlement, with or without full accruals. Accounting is also offered on low and high costs basis, by average cost and with specific tax lot identification. Amortization, accretion, fund accounting and full liability accounting also are provided.

Services offered in the basic master trust/master custodial agreement are securities safekeeping; monthly and annual accounting; on-line period-to-date accounting; on-line cash projection; 5500 reporting; options and futures accounting; legal and regulatory reporting; cash management; STIF sweep; corporate actions; valuation procedures; capital changes, redemptions and maturities; DTC, FRB and participant trust interfaces; wire transfers; proxy notifications; income collection; trade settlement; plan allocation; dividend reinvestment; investment management; and physical safekeeping.

Securities lending; investment analytics; global custody; benefit payments; passive and structured management; record keeping; short-term management; customized reporting and graphics; trade execution monitoring; CPU-to-CPU interface and workstation capabilities; performance measurement; scenario analysis; and relative performance services are available for additional fees.

Record-keeping services offered include participant record keeping, options and futures accounting, mutual fund record keeping and daily pricing and processing of contributions and redemptions.

New features include customized system links, such as auto-reconciliation and single data entry; block trading capabilities; comprehensive on-line security location reporting; on-line processing of private placements; global securities lending; and fully integrated multi-currency reporting.

Fees are based on transaction volume, market value and services.

Robert E. Furst is the client contact.

Wachovia Corp.

301 N. Main St., Winston-Salem, N.C. 27150; (919) 770-6348

	($ millions)
Domestic master trust assets	$35,467
Tax-exempt	$35,427
Taxable	$40
Domestic master custodial	$13,009
Tax-exempt	$8,389
Taxable	$4,620
Domestic master trust clients:	
Tax-exempt	90
Taxable	4
Domestic master custodial clients:	
Tax-exempt	42
Taxable	26
Account supervisors	34
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Wachovia Corp. reported new, tax-exempt domestic master trust business of $487 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $224 million.

The primary accounting method is full accrual, trade date adjusted. Settlement date also is offered.

Services offered in the basic master trust/master custodial agreement are custody, benefit payments, ERISA reporting, cash management, fail float analysis, monthly reporting, plan accounting, on-line inquiry, legal administrative guidance, administration and daily pricing.

Securities lending, global custody, asset allocation, options and futures processing, participant record keeping, performance measurement, portfolio analysis and comparative performance, customized reporting, trade execution reporting, equity index fund, GIC fund, proxy voting and monitoring, flexible reporting, timberland fund, charitable unitized accounting, private foundation, tax preparation and deferred gift administration are available for additional fees.

Record-keeping services offered include participant record keeping for defined contribution plans and master trust plan accounting.

New features include daily valuation of participant accounts and flexible performance measurement reporting.

Fees are based on market value and transaction charges.

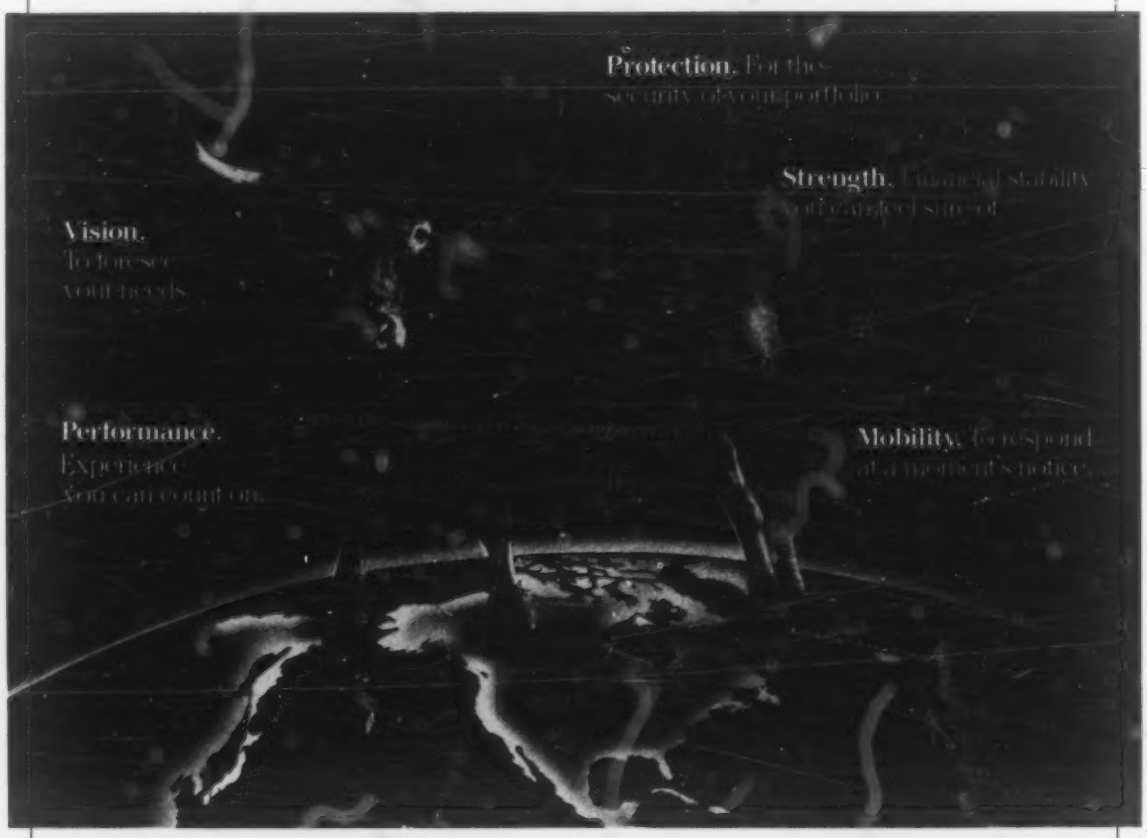
The master trust client contact is Jane B. Fisher; the master custody client contact is David C. Taylor.

Wilmington Trust Co.

Rodney Square North, Wilmington, Del. 19890; (302) 651-1000

	($ millions)
Domestic master trust assets	$20,596
Tax-exempt	$20,596
Domestic master custodial	$471
Tax-exempt	$471
Domestic master trust clients	12
Domestic master custodial clients	5
Account supervisors	6
Reports available on-line:	
Monthly transaction	
Asset & liability	

Few firms share our qualifications as a global custodian.



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Wilmington Trust Co. offers trade date, full accrual as the primary accounting method. Contractual settlement date and cash accounting are also offered.

Services offered in the basic master trust/master custodial agreement are custody, cash management, master trust reporting, options and futures processing and performance measurement.

Investment and analytic services, on-line access, securities lending, global custody, pension disbursement and record keeping are available for additional fees.

New features include current value reporting and cash flow projections.

Fees are based on asset value and transaction charges.

Barbara Uberti is the client contact.

GLOBAL

Bank of America

555 California St., San Francisco, Calif. 94104; (415) 622-1988

	($ millions)
Total global custody assets	$13,000
U.S. tax-exempt	$2,260
U.S. taxable	$1,500
Account supervisors	12
Reports available on-line:	
Monthly transaction	

Countries serviced by Bank of America's global custody network are Japan, the United Kingdom and the United States. Twenty-six other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in 29 countries.

Fees are based on asset value, transaction charges (determined by country of investment) and client reporting requirements. A flat, fixed fee or a per-product price, based upon an agreed service plan, can be provided.

Record-keeping services include multicurrency accounting and reporting, foreign exchange, fund accounting for non-U.S.-based funds with offshore investments, securities lending reporting, cash management services and on-line portfolio reporting.

The client contact is Robert Darmanin.

Bank of Boston

150 Royall St., Canton, Mass. 02021; (617) 575-2171

	($ millions)
Total global custody assets	$4,300
U.S. tax-exempt	$300
U.S. taxable	$4,000
Account supervisors	8
Reports available on-line:	
Monthly transaction	
Asset & liability	

Countries serviced by Bank of Boston's global custody network are Argentina, Brazil and the United States. Thirty-two other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding in all countries where tax reclaims are remitted under local laws.

Fees are unbundled to the country level, then are calculated based on assets and transactions.

Record-keeping services include donor accounting, master trust services and transfer agent for closed-end mutual funds.

The client contact is John Houlihan.

The Bank of New York

1 Wall St., New York, N.Y. 10286; (212) 495-1784

	($ millions)
Total global custody assets	$27,000
U.S. tax-exempt	$3,600
U.S. taxable	$23,400
Account supervisors	26
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Countries serviced by The Bank of New York's global custody network are Argentina, the United Kingdom and the United States. Thirty-two other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding.

Fees are based on asset market value, transactions, portfolio structure and services required.

Record-keeping services include a multicurrency reporting package and performance measurement.

The client contacts are Curtis Yamaoka, Janet Zaloom and Fred Ricciardi.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017; (212) 454-4652

	($ millions)
Total global custody assets	$23,200
U.S. tax-exempt	$12,360
U.S. taxable	$369
Account supervisors	18
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Countries serviced by Bankers Trust Co.'s global custody network are Ireland, New Zealand, Switzerland, the United Kingdom and the United States. Twenty-nine other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding in 18 countries.

Fees are based on the number of portfolios, asset size, country exposure and transaction volume.

Record-keeping services include on-line access to activity reports on all securities and cash activity, multicurrency accounting, account position and transactions, fund valuation and performance measurement.

Mary Ann Schreiber is client contact.

Barclays Bank PLC

Global Custody Group, 75 Wall St., New York, N.Y. 10265; (212) 412-3439

	($ millions)
Total global custody assets	$135,000
U.S. tax-exempt	$400
U.S. taxable	$550
Account supervisors	19
Reports available on-line:	
Monthly transaction	
Asset & liability	

Countries serviced by Barclays Bank PLC's global custody network are the United Kingdom, Australia, Canada, the Channel Islands, France, Germany, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Portugal, Singapore, Spain, Switzerland and the United States. Fifteen other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding.

Fees are based on a portfolio fee and a transaction fee, which are country specific, as well as on a reporting fee.

The client contacts are Paul Corelli and Robert Hetsenrether.

Boatmen's Trust Co.

100 N. Broadway, St. Louis, Mo. 63102; (314) 466-3800

	($ millions)
Total global custody assets	$355
U.S. tax-exempt	$355
Account supervisors	3
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Boatmen's Trust Co. offers a "private label" product for which Bankers Trust and Chase Manhattan are the primary suppliers of the subcustodial network.

Thirty-four countries are serviced by the global custody network.

The bank assists clients with foreign tax withholding in those countries where a dual taxation treaty exists.

Fees are based on manager charges, market value and transactions.

Richard W. Hibbs is client contact.

Boston Safe Deposit and Trust Co.

1 Boston Place, Boston, Mass. 02108; (617) 722-7000

	($ millions)
Total global custody assets	$29,013
U.S. tax-exempt	$20,788
U.S. taxable	$5,290
Account supervisors	33
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Boston Safe Deposit and Trust Co.'s global custody network services 39 countries. The bank assists clients with foreign tax withholding in all countries serviced by the global custody network.

Fees are calculated on any of the following: portfolio charges, asset-based charges, transaction charges, ancillary services and incremental costs.

Record-keeping services include benefit disbursements, performance measurement, analytics, on-line inquiry and reporting, multicustodian reconciliation and securities lending.

The client contact is Paul S. Maregni.

Brown Brothers Harriman

40 Water St., Boston, Mass. 02109; (617) 742-1818

	($ millions)
Total global custody assets	$110,000
U.S. tax-exempt	$1,250
U.S. taxable	$46,000
Account supervisors	75
Reports available on-line:	
Monthly transaction	
Asset & liability	

The United States is serviced directly by Brown Brothers Harriman & Co.'s global custody network. Thirty-eight other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries serviced by the global custody network.

Fees are calculated on the market value of assets and transactions.

Record-keeping services include multicurrency accounting and valuation.

The client contact is Susan Livingston.

The Chase Manhattan Bank

1211 Sixth Ave., New York, N.Y. 10036; (212) 789-4118

	($ millions)
Total global custody assets	$136,700
U.S. tax-exempt	$19,100

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U.S. taxable ..... $53[illegible]0
Account supervisors 31
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Countries serviced by The Chase Manhattan Bank's global custody network are Argentina, Australia, Brazil, Chile, Germany, Hong Kong, Italy, Japan, Malaysia, Mexico, Singapore, Spain, Taiwan, Thailand, Turkey, United Kingdom, United States and Venezuela. Eighteen other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding in all countries serviced where taxes are reclaimable.

Fees are calculated by market value, transaction type and volume, and portfolio type and volume by country.

Record-keeping services include multicurrency valuation, tax lot reporting, participant record keeping, securities lending reporting and transfer agent.

The client contact is Peter Derrenbach.

Chemical Banking Corp.

55 Water St., New York, N.Y. 10041; (212) 820-5000

($ millions)
Total global custody assets $17,000
U.S. tax-exempt $50
U.S. taxable $1,500
Account supervisors 8
Reports available on-line:
Monthly transaction
Asset & liability

Countries serviced by Chemical Banking Corp.'s global custody network are Belgium, Guernsey, Luxembourg, the United States and the United Kingdom. Twenty-six other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding. Fees are based on volume and country activity.

Record-keeping services include full accrual accounting and reporting, cash management services and on-line inquiry and input reporting.

The client contact is Ken Montgomery.

Citibank

111 Wall St., New York, N.Y. 10043; (212) 657-9102

($ millions)
Total global custody assets $169,000
U.S. tax-exempt $2,000
U.S. taxable $11,000
Account supervisors 250
Reports available on-line:
Monthly transaction
Asset & liability

Thirty-five countries in Citibank's global custody network are serviced directly by the bank's own branches and subsidiaries. Eleven other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding.

Fees are calculated on the basis of the countries of investment and services used.

Record-keeping services include multicurrency reporting, daily on-line activity reports, participant record keeping, foreign exchange, income collection, securities lending reports and fund accounting for non-U.S. based funds with offshore investments.

The client contact for North America is Kenneth A. Hines Jr.

Continental Bank

231 S. LaSalle St., Chicago, Ill. 60697; (312) 828-4038

($ millions)
Total global custody assets $2,730
U.S. tax-exempt $420
U.S. taxable $2,278
Account supervisors 4
Reports available on-line:
Monthly transaction
Asset & liability

Continental Bank directly services the United States. Twenty-five other countries in the global custody network are served by a subcustodian.

The bank assists clients with foreign tax withholding in countries where dual tax treaties exist.

Fees are based on market value, transactions, and the costs of investing in foreign markets.

Record-keeping services include international securities lending, foreign exchange and risk management.

The client contact is Cheryl A. Derezinski.

CoreStates Bank

P.O. Box 7558, Philadelphia, Pa. 19101-7558; (215) 786-7946

($ millions)
Total global custody assets $1,300
U.S. tax-exempt $1,300

CoreStates Bank offers a "private label" product for which State Street Bank and Trust Co. is the primary supplier of the subcustodial network.

The client contact is Jerry Hayes.

Investment management consultants will be profiled in the Nov. 11 issue of *Pensions & Investments*.

First Interstate Bank Ltd.

707 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 614-2291

($ millions)
Total global custody assets $320
U.S. tax-exempt $320
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

First Interstate Bank Ltd. offers a "private label" product for which Chase Manhattan Bank is the primary supplier of the subcustodial network.

Thirty-three countries are serviced by the global custody network. The bank assists clients with foreign tax withholding in all countries in the network.

Fees are calculated on the basis of market value and transaction volume.

The client contact is Deborah Dilley.

The First National Bank of Chicago

1 First National Plaza, Chicago, Ill. 60670; (312) 732-8130

($ millions)
Total global custody assets $7,000
U.S. tax-exempt $2,000
U.S. taxable $4,000
Account supervisors 3
Reports available on-line:
Monthly transaction
Performance measurement

The First National Bank of Chicago's global custody network services [illegible] through subcustodians.

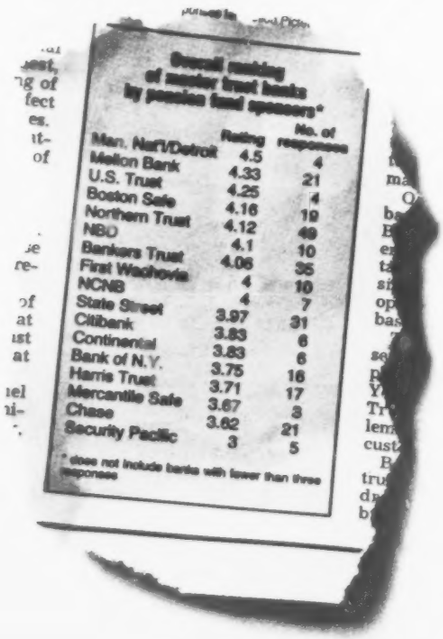
The bank assists clients with foreign tax withholding in all countries where tax withholding reclaims are possible.

Fees are based on a basic account charge (fixed or based on asset value), plus activity fees and external/subcustodian charges at cost.

Record-keeping services include multicurrency valuations, portfolio analysis by country/investment sector and income received/receivable.

The client contact is Marcia L. Wallace.

There are dozens of good ways to invest your pension funds.



But apparently only one way to control them.

That's according to Pensions & Investments Magazine. In their latest Master Trust Survey, Manufacturers Bank was ranked highest in overall customer satisfaction.

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Global custodians ranked by U.S. tax-exempt assets

State Street Bank	36,526
Chase Manhattan	19,100
Bankers Trust	12,360
J.P. Morgan	6,000
Harris Trust	2,600
Mitsubishi Global	2,470
Citibank	2,000
Morgan Stanley	1,765
Midland Securities	1,500
NCNB	600
NBD Bank	500
Barclays Bank	400
First Trust	100
Total	141,789

First Trust National Association

180 E. Fifth St., SPFT0402, St. Paul, Minn. 55101; (612) 223-7402

($ millions)
Total global custody assets $990
U.S. tax-exempt $100
U.S. taxable $890
Account supervisors 11
Reports available on-line:
Monthly transaction
Asset & liability

First Trust National Association's global custody network uses subcustodians to service 25 countries. The bank assists clients with foreign tax withholding in 11 countries.

Fees include a transaction fee, inventory holding charge (basis points), wire fee and some subcustodian charges.

Record-keeping services include daily foreign cash balance; daily trade failed, pending and settlement report; daily recap of foreign exchange activity; daily dividend information; and a monthly outstanding tax reclaim report.

The client contact is Michael C. Derck.

Harris Trust & Savings Bank

111 W. Monroe St., Chicago, Ill. 60603; (312) 461-2121

	($ millions)
Total global custody assets	$14,600
U.S. tax-exempt	$2,600
U.S. taxable	$2,300
Account supervisors	24
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Harris Trust & Savings Bank's global custody network services 27 countries through subcustodians. The bank assists with tax withholding in all countries where tax reclamations are available.

Fees are based on assets' market value, plus a charge for foreign exchange settlements.

Record-keeping services include electronic data transfer.

The client contact is Beth Stubenrauch.

Manufacturers Bank

411 W. Lafayette, Detroit, Mich. 48226; (313) 222-5414

	($ millions)
Total global custody assets	$283
U.S. tax-exempt	$283
Account supervisors	10
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Manufacturers Bank offers a "private label" product for which Morgan Stanley Trust Co. is the primary supplier of the subcustodial network.

Thirty-one countries are serviced by the global custody network. The bank assists clients with foreign tax withholding.

Fees are based on asset value and transaction activity.

The client contact is Larry Rankens.

Manufacturers Hanover

270 Park Ave., New York, N.Y. 10017; (212) 613-7309

	($ millions)
Total global custody assets	$70,000
U.S. tax-exempt	$1,500
Account supervisors	30
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

The United Kingdom is serviced by Manufacturers Hanover's global custody network. Thirty other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries serviced by the global custody network.

Standard fees are based on a fee for each security transaction and an ad-valorum charge on the value of the portfolio. Fees are typically structured in four bands, depending on the relative inefficiencies and costs of the various markets.

The client contact is Greg di Pretoro.

Mellon Bank

1 Mellon Bank Center, Suite 3325, Pittsburgh, Pa. 15258; (412) 234-1336

	($ millions)
Total global custody assets	$7,300
U.S. tax-exempt	$7,100
Account supervisors	25
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Mellon Bank's global custody network services 30 countries through subcustodians.

The bank assists clients with foreign tax withholding in all countries served by the network.

Fees are calculated on the basis of account base charge, asset value and transaction charges.

Record-keeping services include multicurrency accounting.

The client contact is Timothy F. Keaney.

Midland Securities Services

5 Laurence Pountney Hill, London EC4R 0EU, U.K.; 71-260-6334

	($ millions)
Total global custody assets	$97,200
U.S. tax-exempt	$1,500
Account supervisors	40
Reports available on-line:	
Monthly transaction	
Asset & liability	

Midland Securities Services services 50 countries through subcustodians in the global custody network. The United Kingdom is serviced directly by the bank.

The bank assists clients with foreign tax withholding in 19 countries.

Fees are calculated on either a basis point charge on asset value or per line. Transaction fees are at a flat rate; prices vary by location.

Record-keeping services include tax lot accounting, multicurrency reporting, electronic reporting, cash projection and cash management.

The client contact is Richard Hogsflesh.

Mitsubishi Global Custody

800 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 621-1393

	($ millions)
Total global custody assets	$6,500
U.S. tax-exempt	$2,470
U.S. taxable	$4,030
Account supervisors	3
Reports available on-line:	
Monthly transaction	
Asset & liability	

Mitsubishi Global Custody directly services Japan in its global custody network; 21 other countries are served by subcustodians. The bank assists clients with foreign tax withholding in 13 countries.

Fees vary by country, calculated as a percentage of market value, plus a per transaction charge.

Record-keeping services include securities lending.

The client contact is Janet Potter.

J.P. Morgan

60 Wall St., New York, N.Y. 10260; (212) 648-3250

	($ millions)
Total global custody assets	$60,000
U.S. tax-exempt	$6,000
U.S. taxable	$54,000
Account supervisors	45

Countries serviced by J.P. Morgan's global custody network are Belgium, France, Germany, Italy, Japan, Spain, Switzerland, the United Kingdom and the United States. Twenty-three other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding in all countries, depending on the eligibility of the client and specific country regulations.

Fees are based on a basis point methodology, based on the value of the portfolio plus transaction costs.

Record-keeping services include daily real-time reporting, including currency management, settlements, pending transactions, failed transactions, settled income and asset positions.

The client contact is Rene Vanguestaine.

Morgan Stanley Global Securities Services

1251 Avenue of the Americas, New York, N.Y. 10020; (718) 754-2900

	($ millions)
Total global custody assets	$16,000
U.S. tax-exempt	$1,765
U.S. taxable	$8,667
Account supervisors	17
Reports available on-line:	
Monthly transaction	
Asset & liability	

Morgan Stanley Global Securities Services services Japan directly by its global custody network. Thirty-two other countries are served by subcustodians. The bank assists clients with foreign tax withholding in 14 countries.

Fees are unbundled and fall into two categories: an asset-based fee, applied to average assets in each country, and a transaction-based fee, attributed to each security movement in that country.

Record-keeping services include multicurrency reporting, dividend processing, corporate action and reorganization coverage, daily reporting, foreign exchange, securities lending and cash management.

The client contact in the United States is John A. Roberts at (201) 915-3901.

NBD Bank

611 Woodward Ave., Detroit, Mich. 48226; (313) 225-2600

	($ millions)
Total global custody assets	$500
U.S. tax-exempt	$500
Account supervisors	3

The United Kingdom and Japan are serviced by NBD Bank's global custody network. Twenty other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding in all countries served by the global custody network.

Fees are calculated on the basis of asset value and transaction charge, by location of country, subject to a minimum charge.

The client contact is Jon R. Mittler.

NCNB

1 NCNB Plaza T10-10, Charlotte, N.C. 28255; (704) 386-5115

	($ millions)
Total global custody assets	$600
U.S. tax-exempt	$600
Account supervisors	3
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

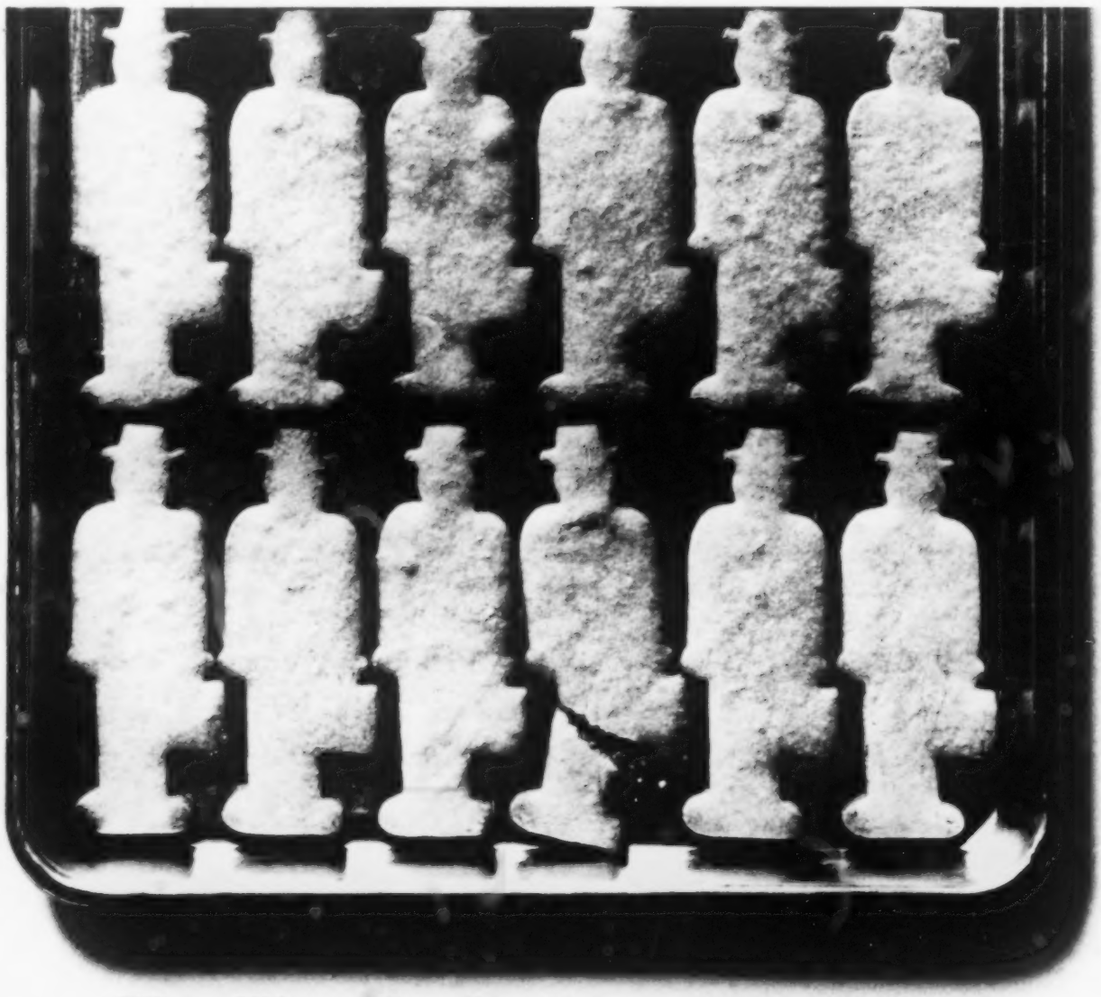
NCNB offers a "private label" product for which Chase Manhattan Bank is the primary supplier of the subcustodial network.

Thirty-three countries are serviced by the global custody network. The bank assists clients with foreign tax withholding in all 33 countries.

Fees are calculated on the basis of an account fee of $7,500 per account per year and a market value fee of 16 basis points per year.

The client contacts are James D. Wahl and F. Huling Poston.

Post-1992 Europe: Oct. 28.



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The Northern Trust Co.
50 S. LaSalle, Chicago, Ill. 60675; (312) 630-6000

	($ millions)
Total global custody assets	$24,000
U.S. tax-exempt	$13,500
U.S. taxable	$1,900
Account supervisors	69
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

The Northern Trust Co.'s global custody network services the United Kingdom and the United States. Thirty other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all the countries.

Fees are negotiated on a case-by-case basis.

Record-keeping services include tax reclamation reporting, full multicurrency performance measurement, international proxy services, payable date income crediting in major markets, international securities lending, multicurrency interest-bearing short-term investment vehicles with cash projection reporting and participant-level reporting for commingled funds.

The client contact is Jennifer Tretheway.

Norwest Bank Minnesota
Norwest Center, Sixth & Marquette, Minneapolis, Minn. 55479; (612) 667-4073

	($ millions)
Total global custody assets	$216
U.S. tax-exempt	$52
U.S. taxable	$164
Account supervisors	10
Reports available on-line:	
Monthly transaction	
Asset & liability	

Norwest Bank Minnesota offers a "private label" product, for which Morgan Stanley is the primary supplier of the subcustodial network.

Thirty-three countries are serviced by the global custody network. The bank assists clients with foreign tax withholding in all countries.

Fees are calculated based on market value plus transaction fees.

Record-keeping services include mutual fund accounting and shareholder services, and international securities lending.

The client contact is Bob Smith.

Royal Trust Corp. of Canada
Royal Trust Global Custody, King's Head House, King's Head Yard, Borough High St., London SE1 1NA, U.K.; 71-236-6044

	($ millions)
Total global custody assets	$36,000

Royal Trust Corp. of Canada, which specializes in global custody for Canadian-based investors, services the United Kingdom and Canada. Twenty-two other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding in Australia, Finland, Japan, New Zealand, Norway and the United States. Tax reclamation is provided in most markets.

Fees are negotiated individually, based on asset value, transactional activity and value-added services.

Record-keeping services include portfolio valuation summary and valuation by country/currency; book value reconciliation; purchases and sales by country/currency; pending trades; capital issues; accrued dividends and interest; cash summary; foreign exchange transactions and summary; and exchange rate reporting.

The client contact in Toronto is Mary Taylor at (416) 981-6982.

Security Pacific-The Sequor Group
127 John St., New York, N.Y. 10038; (212) 952-9278

	($ millions)
Total global custody assets	$11,000
U.S. tax-exempt	$2,500
U.S. taxable	$5,500
Account supervisors	35
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Security Pacific — The Sequor Group's global custody network services Chile, France, Hong Kong, Japan, Malaysia, Singapore, Switzerland, Thailand, the United Kingdom and United States. Eighteen countries are serviced by a subcustodian.

The bank assists clients with foreign tax withholding in all countries serviced by the global custody network.

Fees are calculated on the basis of market value and transaction activity.

Record-keeping services include cash management, foreign exchange, global master trust, multicurrency valuations, securities lending, tax reclamation reporting, global proxy reporting and performance measurement.

The client contact is Cathy V. Holsey.

State Street Bank and Trust
P.O. Box 1992, Boston, Mass. 02105-1992; (617) 847-2511

	($ millions)
Total global custody assets	$85,950
U.S. tax-exempt	$36,526
U.S. taxable	$13,600
Account supervisors	91
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

State Street Bank and Trust Co.'s global custody network services the United Kingdom and the United States. Thirty-one other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries served by the global custody network.

Fees are unbundled and are allocated by asset value, transactions and subcustodian holding costs.

Record-keeping services include international mutual fund accounting, multicurrency performance measurement, international 24-hour securities lending, consolidated record keeping for worldwide affiliates, international cash management and global proxy voting.

The client contact is Frank D. Antin.

SunTrust Banks Inc.
25 Park Place, Atlanta, Ga. 30303; (404) 588-8636

	($ millions)
Total global custody assets	$5,770
U.S. tax-exempt	$70
U.S. taxable	$5,700
Account supervisors	1
Reports available on-line:	
Monthly transaction	

SunTrust Banks Inc. offers a "private label" product, for which State Street Bank and Trust Co. is the primary supplier of the subcustodial network.

Thirty-three countries are serviced by the global custody network.

Fees are based on face value or market value of assets.

Record-keeping services include U.S. and global asset consolidation reports on a limited basis.

U.S. Trust Co. of New York
114 W. 47th St., New York, N.Y. 10036-1532; (212) 852-1000

	($ millions)
Total global custody assets	$1,862
U.S. tax-exempt	$600
U.S. taxable	$1,262
Account supervisors	4
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

U.S. Trust Co. of New York's global custody network services 31 countries.

The bank assists clients with foreign tax withholding in all countries serviced by the global custody network.

Fees are asset and transaction based.

Record-keeping services include advanced performance measurement, daily pricing and accruals, cash management, investment analytics, global securities lending and multicurrency reporting.

The client contact is Robert E. Furst.

Wachovia Corp.
301 N. Main, Winston-Salem, N.C. 27150; (919) 770-6348

	($ millions)
Total global custody assets	$850
U.S. tax-exempt	$567
U.S. taxable	$283
Account supervisors	5
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Wachovia Corp. offers a "private label" product, for which Chase Manhattan-London is the primary supplier of the subcustodial network.

Fees are calculated on the basis of the market value of the assets and transaction costs by country.

Charlotte firm is acquired

CHARLOTTE, N.C. — Sterling Capital Management has acquired Trinity Capital Advisors. Both firms are in Charlotte.

The principals of Trinity — David Ralston, Mark Whalen and Alex McAlister — will become principals of Sterling.

With the acquisition, Sterling will have $750 million under management, of which $450 million is for pension, profit-sharing and endowment plans.

Sterling is a balanced manager using intermediate-term bonds. Trinity Capital specialized in short-term fixed-income portfolios, which now will be offered by Sterling.

Sterling is owned by United Asset Management Co. ■

When Burroughs And Sperry Merged Into Unisys, Which Master Trustee Did They Bring On Line?

UNISYS

The Burroughs/Sperry merger was the largest ever for the computer industry.

It produced a strong new company, with two distinct pension asset pools totalling $3 billion —and a decision to make.

Dealing with two separate master trustees was not practical.

So the Harris Bank, a proponent of the team approach to account management, was evaluated along with other well-known custodians who operated from the more traditional approach.

The Harris team came out on top.

One reason is that the Harris Bank team approach keeps Unisys' portfolio business from bogging down. So more business becomes doable. Easy access to Harris team members means instantaneous response, better communications, more flexibility and maximized synergy.

This all makes for timely and accurate reporting. With information more easily retrievable for Unisys, through our on-line data base. And it means portfolio changes are handled and settled smoothly, because our good working rapport with Unisys' investment managers eliminates operational hindrances. Maybe that's why Harris Bank is one of the favorite trustees among investment managers.

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U.K. banks slow in entering U.S. market

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The Big Bang, the Group of Thirty recommendations on refining settlement procedures and new depository and settlement systems in London may give U.K. custodians an impetus to generate new ideas and new ways to pursue pension fund business, but it will take some time.

"ERISA was passed in 1974. Master trust products did not develop until around 1980," said Peter Demmer, chairman of Sterling Resources Inc., New York, a strategic consulting and perfor-

See **U.K.** *on page 47*

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Inroads

Continued from page 18

tody might become more attractive.

Citibank has had significant success in the Netherlands, where it has marketed since 1987. It has 1.14 billion pounds ($2 billion) under master custody from three large pension funds.

After only a year of marketing to U.K. pension funds, Bankers Trust has about 2.29 billion pounds ($4 billion) in master custody assets from funds including British Petroleum Co. and another 2.57 billion pounds ($4.5 billion) for unit trusts, the U.K. equivalent of mutual funds, said Mark Kerns, marketing director for Bankers Trust's master custody service.

The service was launched as a joint venture with the WM Co., which Bankers Trust acquired in 1987. One motivation for the acquisition was to build a master custody service catering to European clients. Now the bank is expanding business on the Continent.

While the majority of U.S. banks are focusing master custody efforts on externally managed funds, Bankers Trust also is focusing on internally managed funds like BP. "They want the integration of custody, reporting and performance measurement and a single input updating all of those functions. Other banks don't have the front-end capabilities," Mr. Kerns said.

State Street London has 5.1 billion pounds ($8.98 billion) in U.K. custody assets for 43 clients, a dozen of them pension funds. The funds represent more than 50% of the total.

Boston Safe Deposit & Trust Co. U.K. Ltd. has 286 million pounds ($500 million) in U.K.-sourced global custody assets. The relationships are with fund managers or pension funds. The bank has no master custody business as yet, but is actively pursuing such relationships with pension funds and insurance companies, according to Philipp Mayer, managing director of Boston Safe.

Bank of New York is beefing up its U.K. efforts, which began 18 months ago. It just hired a third professional to oversee client relationships. It has more than 4.6 billion pounds ($8 billion) in U.K. custody assets, not all of it for pension funds.

Without a master custodian, U.K. funds "cannot aggressively manage cash balances or lend securities, which is big money. . . . Anyone who says it's about consolidated reporting is out of their mind," said Michael Borkan, vice president of Bank of New York. ■

Banks

Continued from page 17

banks are better suited to certain tasks than others," he said.

While some sources claim using multiple trustee banks could be more expensive than using one or two, others say fees are negotiable and some trustee relationships are not based on the total asset size of the plan but on transactions, which lowers the overall cost.

Richard Adamski, treasurer at the giant $100 billion Teachers Insurance and Annuity Association-College Retirement Equities Fund, New York, said trustees are hired for specific expertise in handling fixed-income or equity securities. TIAA's master trustees are Citibank and Morgan Guaranty Trust Co. CREF's master trustees are Bankers Trust and Morgan Guaranty.

"Certain banks have systems more geared to specific needs," Mr. Adamski said. "Some have developed specific types of reporting capabilities and specialize in corporate debt securities or in equity securities.

"For us, we take our equity ownership responsibility very seriously and, as a result, you have proxy materials and other statements. Our banks ensure that all proxy notices are received by us on a timely basis. The other banks have more sophisticated accounting systems for corporate debt for our needs."

He said TIAA-CREF doesn't consciously play its banks against each other, but having multiple relationships is a "healthy situation . . . and enables us to compare service capabilities and it provides us with market intelligence on pricing structures and pricing trends."

The use of multiple master trustees is not widespread and might shrink further in years ahead as plan sponsors review fee structures and continue the long-standing trend of consolidating banking relationships. The trend is evident not only in the trust area but in other areas of corporate finance, such as treasury and cash management, where consolidation has been under way for several years.

David Pittman, director-trust institutional services for Northern Trust Bank of Texas, Dallas, said the use of multiple trustees by some plans "just evolved over time. . . . If they were selecting today, they probably wouldn't select that way. If they were to conduct an evaluation of their needs today, they probably would put all their business with a single trustee; the trend now is to consolidate." ■

Rank

Continued from page 17

on the part of the bank to build relationships between the bank and investment managers.

Thomas Kimen, senior vice president at Northern Trust, said, "we treat managers like clients, calling on them on a regular basis."

A Harris Bank spokeswoman said while many banks handle relations through marketing people in an operations department, Harris has an investment manager relations unit, which reports directly to the manager of the master trust department.

In the previous *P&I* manager survey conducted in 1988, Marshall & Ilsley Trust Co., Milwaukee; Ameritrust Co., Cleveland; and Wilmington Trust Co., Wilmington, Del.; topped the listing in overall ratings. In this year's survey, Wilmington Trust ranked fifth in overall satisfaction with an average rating of 4.06 from 16 managers; and Ameritrust ranked 10th with 3.87 from 23 managers. Marshall & Ilsley was dropped inadvertently from the survey sheet.

This year, Northern Trust topped the listing in average ratings of security clearance, with 4.11 from 95 respondents, and tied with Continental as tops in up-to-date cash/transaction activity reports with a ranking of 4.14 from 96 respondents; Continental had 28 respondents.

For global custody, the highest average rating went to Continental Bank, with 4.45 from 11 respondents. In the 1988 survey, only 16 of the 32 banks ranked were rated on their global custody services; of those, Bank of New York topped the list with 4.33 from three managers. This year, all 30 banks in the survey were rated on global custody.

Continental also received the top satisfaction rating for automatic investment of cash balances, with 4.36 from 28 managers, and for account representative capabilities, with 4.3 from 30 managers.

SunTrust Banks Inc., Atlanta, was ranked highest in manager satisfaction for prompt cash crediting, with a 4.33 average rating from six managers.

Wilmington Trust, with 4.27 from 15 managers, topped the average satisfaction ranking for reporting accuracy, which it also led in the 1988 survey.

Boston Safe Deposit and Trust Co., Boston, received an average of 4.22 from 79 managers to lead the survey's rating of the institutions' cooperativeness. ■

U.K.

Continued from page 46

mance support firm.

Nevertheless, U.K. banks led by Midland Securities Services, Barclays Global Securities Services and County NatWest Securities Corp. have invested heavily in upgrading systems and customizing to fit European markets, which have different accounting conventions and styles of dealing with managers and banks.

Midland, which has been marketing in the United States for 18 months, is one of the few U.K. banks with a chunk of U.S. business ($5.5 billion), though none is for pension funds directly. Midland is marketing its private label custody services to U.S. regional banks and its U.K.-only capabilities to U.S. global custody banks.

"We are the largest custodian in the U.K. of overseas-owned assets catering to the wholesale end of the industry. We would not wish to go in and sell directly to their client base," said Richard Hogsflesh, sales and marketing director at Midland.

Still, Midland began marketing its U.K. and Pacific Basin capabilities directly to major U.S. pension funds that invest so much internationally they could build their own network of agent banks instead of having one global custodian. It is responding to eight requests for proposals.

Mr. Demmer cautioned that U.S. banks should not underestimate the potential competition. "In the United States, U.K. banks operate with the same advantages as U.S. banks had in the United Kingdom: a fresh approach," he said. ■

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The international weighting puzzle

Exploring alternatives to capitalization

By Greg Allen and Carol Allen

In the quest for a reasonable performance benchmark for international equity portfolios, the issue of what weight to assign each country is often called into question.

Capitalization weighting is the most common approach, with Morgan Stanley Capital International, Goldman Sachs/FT Actuaries and Salomon Brothers all maintaining indexes of this type. The justification for capitalization weighting a portfolio is actually twofold.

On the one hand, there is a theoretical argument that stems from the Capital Asset Pricing Model that says that under an extremely restrictive set of assumptions, capitalization weighting yields an efficient portfolio. On the other hand, cap-weighted portfolios are relatively easy to maintain because the rebalancing process pretty much takes care of itself.

The first argument breaks down when portfolios are being built with securities from a diverse set of markets.

Cultural and economic barriers to asset flows between countries ultimately cause entire markets to be mispriced relative to one another.

Perhaps the most striking example of this is in the Japanese equity market, where local investor preference for Japanese securities has pushed price-to-earnings ratios for the stocks to levels rarely seen in other countries. This relative mispricing almost guarantees that a cap-weighted portfolio will offer an inefficient trade-off between risk and return. In a practical sense it also guarantees volatile Japanese securities will play an inordinately large role in determining total return.

Many weighting schemes have been advanced for the construction of international indexes to avoid this problem. This article briefly explores two such schemes — gross domestic product weighting and import weighting — and contrasts them with a cap-weighted approach.

The comparison will be done in the context of relative country weights; historical risks and returns; and the costs associated with portfolio turnover. Overall,

See **Weight** *on page 49*

Greg Allen and Carol Allen are manager-quantitative consulting and investment analyst, respectively, at Callan Associates Inc., a San Francisco consulting firm.

Table 1

Weighting schemes for international benchmarks

Australia	2.7%	2.7%	2.1%
Belgium	1.1	2.0	2.1
Finland	0.3	1.4	0.6
Germany	6.3	15.0	12.6
Italy	2.4	10.8	5.8
New Zealand	0.2	0.4	0.5
Norway	0.4	1.1	0.9
Spain	1.9	4.9	1.5
Switzerland	3.2	2.3	2.3

Table 2

Indexes' performance before transaction costs

EAFE (capitalization weighted)	17.27%	21.78%	0.793
Trade-weighted	18.71	20.90	0.895

Table 3

Indexes' performance after transaction costs

EAFE (capitalization weighted)	17.27%	21.78%	0.793
Trade weighted	18.39	20.90	0.880

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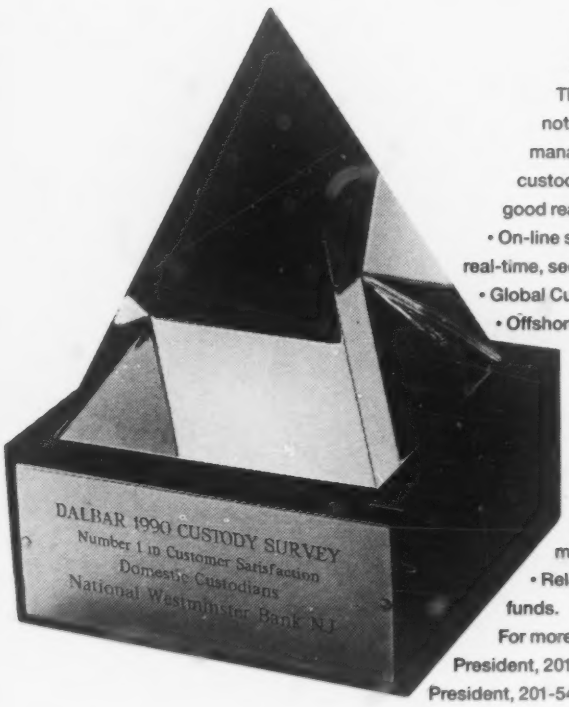

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Weight

Continued from page 48

the import-weighted index seems to have the best trade-off between risk and return.

The argument for GDP-weighting systems stems from the problem of relative mispricing of equity securities across markets.

It is reasoned that, in the absence of consistent securities pricing information, physical production of goods and services serves as a reliable economic proxy for capitalization. This leads to the conclusion the appropriate weight for a country in an international index can be determined by its relative level of GDP.

The primary argument for import weights stems from the liability side of a pension plan.

It is argued the growth of a plan's active liabilities is ultimately driven by inflation. Furthermore, to the extent a future retiree's consumption basket will be composed of goods and services produced outside the United States, this inflation is global in nature. Thus, in order to hedge the plan's assets against this global inflation, equity securities should be held in foreign countries in proportion to the amount that is imported from those countries. This way, retirees' purchasing power will be preserved relative to the prices of goods and services they ultimately will need to buy.

In this comparison, the MSCI Europe Australia Far East Index will be used as the cap-weighted index. All three of the indexes discussed were constructed using MSCI rates of return for the individual countries. The only difference among the three is the relative weights assigned to the countries at the beginning of each quarter.

The weights for the second quarter of 1991 for each index are presented in Table 1.

Table 2 shows the return and risk for each index, as well as the ratio of return to standard deviation. The time period is from the first quarter of 1980 through the second quarter of 1991. The data in this table assume zero transaction costs and quarterly rebalancing.

From this table it is clear both the GDP- and import-weighted indexes have offered a reduced level of risk relative to a cap-weighted index during this period. In addition, the difference in weights combined with the rebalancing process seems to have contributed positively to return.

This result isn't surprising, as rebalancing generally forces the portfolio manager to sell securities that have done relatively well and to buy securities that have performed poorly. This passive process of selling high and buying low generally has a positive impact on return. This is especially true when there is a high degree of disparity in return behavior across markets as is the case with international portfolios.

Unfortunately, conclusions drawn from Table 2 ignore a critical component of the investment process. Different index approaches require different degrees of turnover to retain their proper weights. Cap-weighted portfolios by their nature require very little rebalancing. When the value of an issue (or country) increases, its weight in the index increases by a commensurate amount. Thus, no liquidation of the security (or securities within a country) is required for rebalancing purposes.

With other weighting schemes, this is not the case. From the moment the assets are invested, changes in relative prices are going to pull the index from its desired weights. In principle, this might require the index be rebalanced constantly. In practice, however, a monthly, quarterly, or annual rebalancing strategy usually is employed.

In order to get a flavor for just how significant the impact of rebalancing might have been, turnover was examined during the same time period. Table 3 summarizes the return and risk for each index assuming quarterly rebalancing with no execution error, and transaction costs of 100 basis points for both buys and sells.

The addition of transaction costs into the analysis had no appreciable impact on the risk associated with any of the portfolios. The annual returns, however, were reduced for both the GDP- and import-weighted portfolios by about 30 basis points relative to their zero-transaction-cost benchmarks. This presents a significant drag on total return that actually reduced the return of the GDP-weighted portfolio below that of the EAFE index.

On a risk-adjusted basis, however, both alternatives outperformed the EAFE. Further simulation analysis indicated that by changing the rebalancing frequency to annually from quarterly, the impact of transaction costs could be cut in half with no significant impact on the risk of the portfolios.

The conclusion that can be drawn is that GDP- and import-weighted indexes are viable benchmark alternatives to a cap-weighted approach. Both alternative schemes will reduce a portfolio's exposure to Japanese securities, and both would have resulted in a reduction in risk during the past 11 years.

In implementing these approaches, however, one can expect a significantly higher level of annual turnover that implies an associated increase in transaction costs. Furthermore, to the extent this turnover is anticipated by the broker-dealer community, transaction costs could increase significantly relative to the 100 basis points assumed in this analysis. This would suggest equity index derivatives probably should be employed for successful implementation of this type of program. ■

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Minority

Continued from page 3

Mr. Spruill also believes, however, it will take more than political connections for racial minorities and women to continue to get business.

The minority- and women-owned firm that has taken in the most money for the first eight months of 1991 is NCM Capital Management, Durham, N.C., with $301 million in new tax-exempt assets, bringing its tax-exempt total to $1.06 billion.

NCM's 1991 growth is no surprise. Among all investment firms with assets between $500 million and $1 billion, NCM was the fastest growing money manager for the five years ended Jan. 1, increasing assets under management more than 10,000% (*P&I*, July 8).

Behind NCM was Amerindo Investment Advisors Inc., San Francisco, which reported $200 million in new tax-exempt assets as of June 30, bringing its total to $756.8 million.

Rounding out the top five are Capitalcorp Inc., San Francisco, $155 million; Beal Investment Co., New York, $130 million; and Tiffany Capital Advisors Inc., San Ramon, Calif., $9?.5 million.

All of the top five have more than $100 million in tax-exempt assets under management.

Among firms with less than $100 million, Sturdivant & Co. Inc., Camden, N.J., reports receiving $49 million; Smith, Graham & Co. Asset Managers, Houston, $45 million; RhumbLine Advisers Corp., Boston, $38 million; Gramercy Capital Management Corp., New York, $30 million; and LM Capital Management, La Jolla, Calif., $27 million.

The manner in which minority managers garnered assets under management ranged from responses to requests for proposals, to becoming members of minority trusts, to acquiring seasoned money management professionals who brought assets with them.

Capitalcorp increased its assets under management by $155 million on May 1 when it hired four portfolio managers from Associated Capital, San Francisco, said Joan Muller, vice president, marketing. Capitalcorp now has $212 million of tax-exempt assets under management.

Other money managers were able to add assets by taking advantage of the opportunities presented by minority trusts.

Greaves Capital Management Inc., Atlanta, which oversees $380 million of tax-exempt assets, is a member of three such trusts: the Progress Common Trust, offered by Progress Investment Management Co., San Francisco; Americas Fund, sponsored by Evaluation Associates of Norwalk, Conn.; and the Minority Equity Trust of Bankers Trust Co., New York.

Greaves picked up $135 million so far in 1991, of which $85 million came from new clients. The remaining $50 million came from existing clients, including the trusts, although the exact amount from the trusts could not be broken out.

Among the pension funds hiring minority- and women-owned firms, the $18.9 billion New York City Employees' Retirement System was among the most active, according to *P&I* reports.

Since the beginning of the year, the system committed $100 million to Progress; $24 million to Zevenbergen Capital Management, Seattle; and $25 million to Executive Investment Advisors, Philadelphia.

Another New York City fund — the $5.2 billion New York City Teachers Variable Fund — also added minority managers to its roster, hiring Beal Investment to manage $60 million and Sturdivant to receive $10 million.

Other plan sponsors engaging minority- and women-owned investment managers include: the $12 billion Colorado Public Employees Retirement Association, Denver, which hired NCM for $25 million; the $450 million pension fund of Dominion Resources Inc., Richmond, Va., which hired Smith, Graham for a $5 million allocation; and the $4 billion Illinois State Universities Retirement System, Champaign, which hired Zevenbergen for $15 million and Ariel Capital Management, Chicago, for $25 million. ■

Oregon

Continued from page 2

whether any money was lost as a result of the transactions in question.

Mr. Canby declined to comment. He referred questions to attorney Walter Todd of Todd & Kunhns, Salem.

Mr. Todd couldn't be reached for comment following repeated attempts. Mr. Lemman said the Justice Department can't provide details on the investigation because it is "active;" he said his department doesn't want to be "tipping off people" who might be questioned as part of the investigation.

Even though the Justice Department refused to provide details of the investigation, the Peat Marwick study of the mortgage program does identify areas of concern and makes 27 recommendations.

The study said it "documented the lack of controls, policies and procedures relating to the commercial real estate mortgage and foreclosed real estate functions" of the commercial mortgage program.

The study describes the real estate investment officer, the position held by Mr. Canby, as having virtually unlimited power over the program. The study said there were no audits of his performance or the performance of the program other than those done by Mr. Canby.

According to the study, the real estate investment officer had the ability to authorize the purchase of commercial real estate mortgages, decide from whom they would be purchased and authorize the wire transfer of funds to purchase them. He determined when to sell properties and at what price, and then prepared his own performance reports.

The investment division had no formalized process for doing underwriting or due diligence on those investments, according to the study.

The study said Mr. Canby was solely responsible for approval of proposed investments. It said there were no documented limits for approval or requirement of a secondary authorization from the investment division manager, James C. George.

Mr. George didn't respond to telephone calls requesting comment.

The Oregon treasury had not established a loan committee or other review group to approve large or concentrated mortgage program investments, the study said.

The Treasury, said the study, also had formalized policies and procedure manuals, but no procedure to make sure the manuals had been properly distributed or read.

Until the early 1980s, the study said, investments in the mortgage lending program were serviced and managed by outside financial institutions.

But with the subsequent failure of many of those institutions, the treasury found itself attempting to internally manage the program, the study said.

The treasury, however, didn't have adequate staffing or controls to manage the assets properly. In a multitude of recommendations, KPMG Peat Marwick said the treasury should hire additional personnel and should institute strict internal controls, policies and procedures to enforce them.

In a written statement, Tony Meeker, Oregon treasurer, said he is implementing the recommendations.

"No feeble excuses or finger-pointing will be offered to divert attention from the necessity to take action to prevent future abuse at the expense of the public trust," said Mr. Meeker.

Mr. Lemman said he doesn't know when the justice department's investigation will end.

Investigators need to conduct a "thorough" investigation that involves "millions of dollars over a period of years," he said. ■

PRIM

Continued from page 2

has suffered from the economic recession in the United Kingdom and some overbuilding of office space in London.

Meanwhile, property values in the United Kingdom have declined between 25% and 50%, a source said.

As for the AEW portfolio, Renny Merritt, director of client services for AEW, confirmed AEW offered to resign because of the PRIM board's "deep disappointment" over the performance of its portfolio with AEW.

AEW's proposal is supposed to be taken up at the next PRIM board meeting, set for Nov. 5.

PRIM asked three existing managers — TCW Realty Advisors, Los Angeles; Heitman Advisory Corp., Chicago; and Copley Real Estate Advisors, Boston — to consider taking over the properties.

"We don't want to change until we are confident another manager could pick up the situation and move ahead with it," Mr. Doane said. Plus, PRIM would like to reduce the size of its stable of realty managers; the fund has 11 real estate managers.

The AEW portfolio has eight investments including a large shopping center in Texas; an undeveloped property in New Jersey; an apartment building in the Charlestown section of Boston; a mall in California; and industrial warehouses in the Northeast.

"Some have been disappointing; others have held their own," Mr. Doane said of the properties in the AEW portfolio. But, "the bad ones are a major commitment in the portfolio. So the entire portfolio has suffered by a major amount," he said.

PRIM's devaluation of its real estate portfolio was done to try to "accurately determine what we think represents the values as of June 30," when a new administration took over at PRIM, Mr. Doane said.

"The figure we have is not at this point reflective of certain values provided by our managers," Mr. Doane said. "It's conceivable that (managers) values may lag by six or nine months." ■

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AT DEADLINE

GTE to realign equities

GTE is restructuring its defined benefit plan's more than $4 billion domestic equity portfolio — and its managers — following an intensive review, sources say.

The review was done to help create a "more structured approach to the asset/liability framework" of the portfolio.

Brunswick OKs private vote

Brunswick Corp. has agreed to adopt comprehensive confidential voting procedures, under an agreement with the United Shareholders Association.

Mayor gains fund power

The Illinois Legislature passed a bill giving Chicago Mayor Richard M. Daley the power to replace two ex officio trustees of the city's $2.074 billion municipal pension board and three ex officio members of the $687 million laborers' pension board. City Treasurer Miriam Santos, who sits on both boards, opposed the measure.

Underfunding up $10 billion

The amount of underfunding in the defined benefit plan system has grown to at least $40 billion, up $10 billion from last year, according to PBGC estimates.

Reasons for the increase include weak investment returns and benefit increases in several underfunded union pension plans.

L.A. County shifts assets

The $11.4 billion **Los Angeles County Employees' Retirement Association** selected Morgan Grenfell Asset Management and UBS Asset Management as international equity managers for Europe. The firms likely will be given $120 million each.

INSIDE

GREG LOUDON

Reaching for the dough

Pension cookie jars, with $3 trillion in collective assets, have been alluring targets for public, union — and corporate — officials seeking to pursue economic and political agendas. In Commentary, Page 14.

FRED WILLIAMS

One Dallas Centre needs money for leasing commissions, renovations and debt.

Crow eats adviser fee to rescue realty fund

By Steve Heinerick

DALLAS — Trammell Crow Realty Advisers has offered to give up $6.5 million in management fees as part of an attempt to rescue its troubled $421 million vulture fund as well as its credibility with fund investors.

The fund's investors' committee verbally approved the strategy in September, said Robert Whitman, managing partner with Trammell Crow Ventures and supervisor of the fund.

In addition to forgoing $6.5 million in fees due Crow over the next three years, the strategy involves refinancing a healthy property in Trammell Crow Equity Partners I fund to provide $4.5 million and restructuring, in a small way, the debt of another property in the fund.

The $11 million would be used to rescue the troubled One Dallas Centre, the fund's main property. It would be used to pay leasing commissions for new tenants, tenant renovations and debt.

The One Dallas Centre troubles were the crowning blow in a series of surprises described by investors and Mr. Whitman that has pushed the Trammell Crow Equity Partners I fund to have a return of −15% since its inception.

One investor, Barry L. Stevens, director of the Bureau of Investments for the Michigan Department of Treasury, said of the rescue plans: "It is a difficult situation. It is taking a lot of our time and the other limited partners' time. It's a little premature to say where we and the other limited partners are going to come

See **Crow** *on page 51*

Small-cap firms hit limits

Investors find fewer managers taking new business

By Fred Williams

The strong demand for small-capitalization managers has forced an estimated 20% of such firms to refuse new business.

As a result, executives with the Case Western Reserve University Endowment, Cleveland; the Navy Exchange Service Retirement Plan Trust, New York; and the Fleming Cos. Inc. pension fund, Oklahoma City, all have found a shrinking universe while conducting small-cap manager searches.

The supply of managers could tighten further as latecomers launch searches in the aftermath of the run-up in small-cap stock prices.

Small-cap stocks — out of favor for several years — began to rally last November. For the first three quarters of 1991, the NASDAQ OTC Composite Index is up a smashing 40.9%, compared with 20.4% for the Standard & Poor's 500 Stock Index. Many market analysts predict a continued bull market for small-cap stocks.

The small-cap boom has pushed many managers up against their pre-established limits on the amount of assets under management to avoid a liquidity crunch in a thinly traded market. Plus, the number of shares available is not as large as in the large-cap market.

Nola Williams, vice president and research analyst at The Frank Russell Co., Tacoma, Wash., said 18 of the 85 small-cap managers in the Russell universe have closed to new business, 11 in the past 18 months. A spokeswoman for Wilshire Associates Inc., Los Angeles, said 20% to 25% of the 70 to 90 small-cap firms in the Wilshire universe are refusing to take new business.

Both said other established small-cap managers are expected to reach their capacity as investors continue to pour money into the hot asset class.

"Only those with less experience will be left," Ms. Williams said.

"The pace seems to be slowing somewhat, but I wouldn't stretch out a manager search for any lengthy period of time and expect to find someone with a wealth of experience in the small-cap area."

Among those that have reached their capacity in one or more small-cap funds are Brinson Partners Inc., Wall Street Associates, Westport Capital Management, Peregrine Capital Management Inc., Duncan-Hurst Capital Management, Capital Technology Inc., Frontier Capital Management Co., Jundt Associates Inc., Cadence Capital Management Corp. and Morgan Grenfell Capital Management Inc.

Most of the managers that have stopped taking on new business are small-cap growth managers; small-cap value managers still have capacity, according to consultants.

Kathleen Chapman, director of investments at Case, said the $425 million fund started its search in January and finally hired three small-cap managers in August.

See **Limits** *on page 54*

Fleming Cos., which owns several grocery store chains, has found fewer firms from which to choose in seeking a small-cap manager.

GM drawn to First Exec bid

Gets 25% of equity for standby pledge

By Anne Schwimmer

General Motors Corp.'s pension fund is contributing up to 25% of the $300 million in equity for a bid to purchase First Executive Life Insurance Co.

GM's equity participation was used as a lure by the other three members of the group bidding for the troubled insurer. They used the equity to entice the GM pension fund to commit to funding at least 25% of the additional $700 million standby guaranty also proposed by the group as part of its bid.

GM officials didn't return telephone calls, but the fund's involvement was confirmed by Warren Hellman, a general partner of Hellman & Friedman, San Francisco, which is leading the bid.

The other partners in the group are Zell/Chilmark Fund L.P., Chicago, and Fund American Cos. Inc., Purchase, N.Y.

Each is contributing $75 million to the equity portion.

The standby guaranty would provide extra capital in the form of loans if necessary.

The other partners "would rather have more of the equity" in the First Executive deal, but brought GM pension fund in on the deal because "the $700 million standby for the three of us was a lot," Mr. Hellman said.

NEWS DIGEST

TED FUKA

The 401(k) plan — now 10 years old — changed the structure of retirement income provision in the United States. But it was created by accident, not specific design. See page 17.

A federal magistrate's recommendation could drive thousands of multiemployer health plans to seek ERISA certification from the Department of Labor. Page 30.

Critics charge the PBGC is "crying wolf" by using scare tactics to push its own agenda for reforms and is not in dire financial straits. Page 34.

FINANCING

Demand for new stock offerings is unquenched, despite the huge wave of such offerings, because cash reserves and deal quality both remain high. Page 3.

Spanish market watchers are awaiting a spate of stock offerings by large, government-controlled companies that are expected to be well-received. Page 38.

INTERNATIONAL

The California State Teachers' Retirement System began implementing a global investment strategy by allocating $2.5 billion to 10 equity managers. Page 2.

The European Commission is busily devising proposed rules to liberalize investing for European pension funds as part of the 1992 changes. Page 3.

Pension officials, state treasurers and money managers are heeding the Soviet Union's call for investments and other forms of aid. Page 3.

Pension fund hirings of international managers are down about 40% so far this year, a phenomenon some experts say is only temporary. Page 36.

The Australian public pension fund system has spun off its investment arm into a separate entity called Commonwealth Funds Management. Page 40.

REAL ESTATE

Trammell Crow Realty Advisers offers to give up management fees as part of a plan to rescue a troubled vulture fund. Page 1.

Five retired Eastern Airlines pilots sue over the status of their defined contribution plan, saying it is illiquid because of its heavy allocation to real estate. Page 4.

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Fund hires 10 for global

California Teachers allocates initial $2.5 billion

By Steve Hemmerick

SACRAMENTO, Calif. — The $38 billion California State Teachers' Retirement System has begun implementing a global investment strategy, allocating $2.5 billion to 10 international equity managers.

The fund, which had no non-U.S. investments before, intends to invest the $2.5 billion over the next two years. The plan is to increase the international commitment to $5.7 billion or 15% of assets and, long term, to 25% of assets.

"We are trying to put the foundation on our international diversification strategies," said Tom Flanigan, chief investment officer.

The move had been delayed since April because some of the managers didn't understand state regulations "over the minimum qualifications relative to minority participation. We successfully reinforced that," he said.

The retirement system selected five active international managers that may invest in a mix of European and Japanese security markets, two active European managers, two active Pacific Basin managers and one passive international manager.

Each will be given at least $100 million; the allocations have not yet been decided, said Mr. Flanigan.

The active managers will have full discretion over country and stock selection decisions within their respective geographic mandates. The passive manager's geographic focus has not yet been decided.

"We believe that because of the South African consideration here, which eliminates about 40% of the stocks in EAFE, we may only activate a Pacific Basin index. We haven't made that decision yet, but it is a fairly safe assumption," Mr. Flanigan said.

The firms will be evaluated against a South Africa-free version of either the Morgan Stanley Capital International Europe Australia Far East Index or one of the regional subindexes.

The five active international managers selected are: Morgan Stanley Asset Management, New York; Lazard Freres Asset Management, New York; J.P. Morgan Investment Management Inc., London; PCM International Inc., Short Hills, N.J.; and Capital Guardian Trust Co., Los Angeles.

The two active European managers are: Morgan Grenfell Asset Management, London, and Oechsle International Advisors, Boston.

Selected as active Pacific Basin managers were: Schroder Capital Management International Ltd., London, and Dunedin Fund Managers Ltd., Edinburgh, Scotland.

Wells Fargo Nikko Investment Advisors, San Francisco, is the passive manager.

Under California law, "a firm has to attempt to do 20% of (its) business with woman- and minority-owned firms, subcontracting

See **Global** *on page 52*

SEC Chairman Richard C. Breeden blasted the Business Roundtable for its "hyperactive imagination."

Breeden reaffirms proxy reform effort

By Marlene Givant Star and Joel Chernoff

WASHINGTON — Securities and Exchange Commission Chairman Richard C. Breeden rebuffed efforts by the Business Roundtable to block liberalization of federal proxy rules.

In testimony before the Senate Securities Subcommittee Oct. 17, Mr. Breeden criticized the influential business group for carrying on a "disinformation effort" about the SEC's proposed proxy rule changes.

In particular, he discounted the Roundtable's charges that rule changes allowing "disinterested" shareholders to communicate with each other without filing proxy materials would permit stockholders to form cabals and plot in "smoke-filled rooms."

"I think we have a hyperactive imagination here at work," Mr. Breeden told the subcommittee.

Mr. Breeden's strong support of the SEC's proxy proposals heartened shareholder activists. Some had worried the commission's support for proxy reform was wavering in light of SEC Commissioner Richard Y. Roberts' comment to the American Society of Corporate Secretaries earlier this month that comprehensive proxy reform was dead, and "few addi-

See **Proxy** *on page 53*

Transfer could cut GIC rates

By Hillary Durgin

NEW YORK — Pension funds with Mutual of New York GICs face the prospect of lower rates of return and some delayed payments if they transfer their contracts to Metropolitan Life Insurance Co.

Under an agreement reached by the two mutual insurance companies last week, MONY clients may transfer virtually all of their $1.5 billion in guaranteed investment contracts to Met Life.

Met Life, however, has agreed to pay MONY's interest rate — which averages 9%, but ranges between 8% and 11% — on only one-fifth of the book value of the GICs for the life of the contracts.

According to Felix Schirripa, vice president of pensions at Met Life, MONY's rates of return are about two percentage points higher than those "currently available in the marketplace."

Rates of return on the remaining 80% of book value likely will be lower after the first year.

MONY clients transferring their GICs would re-invest them in a Met Life separate account that will have the same, average maturity of six years. The separate account will pay a rate of return through the end of 1992 based on market conditions on the Dec. 2 transfer date.

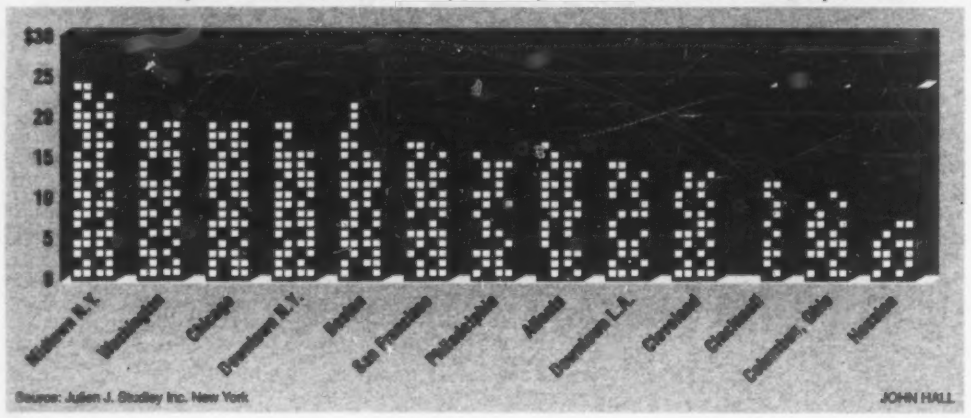
"If the average customer now has a 9% three-year deal, I believe it might be fair to say that the 9% likely will be preserved or there may be something better than 9% during the first year," said Mr. Schirripa.

"The portfolio will have assets relative to Treasuries that at least initially will earn attractive spreads . . . (and) will at least initially compensate the contract holders for the risk they are taking."

See **Transfer** *on page 51*

Comparison of average net rents

All prices are per rentable square foot and exclude concessions. Numbers represent new building construction for "Class A" office space in central business districts (1989-1991). Numbers also reflect full-floor, 10-year leases.



Source: Julien J. Studley Inc. New York JOHN HALL

REAL ESTATE

Tenants gain the upper hand in down office market

■ Tenants have more leverage in the current office rental market than at any time during the past 10 years, a survey shows.

The survey by Julien J. Studley Inc., a New York-based commercial real estate firm, shows "all components of rent are negotiable," said Jacque Ducharme, senior vice president and head of the survey.

Concessions — such as free rent and the dollar amount provided by the landlord for tenant improvements — hit $115 per square foot in Washington, $114 in Chicago and $90 in midtown New York and downtown Los Angeles, but were as low as $17.50 per square foot in Houston.

Average net rents (the basic annual rent calculated on a per-square-foot basis, excluding the tenant's share of tax and operating expenses) increased only in Washington, Houston and Columbus, Ohio, during the past year.

Net rents decreased in New York, Chicago, Boston, San Francisco, Philadelphia, Atlanta, Los Angeles and Cleveland.

Midtown New York is the most costly office market, with total rentals averaging $47 per square foot for new, Class A space. Houston is the cheapest, at $19 per square foot.

— *Nancy K. Webman*

INTERNATIONAL

L.A. County sets regional approach

■ The $11.4 billion Los Angeles County Employees' Retirement Association is trying to regionalize its international manager lineup, said Charles Conrad, administrator.

Toward that end, the fund hired Nomura Investment Management Co. Ltd., Tokyo, and Schroder Investment Management Ltd., London, as Far East international equity managers.

Each will receive about $120 million.

Funding for the pair and for one or more European managers expected to be hired in about 60 days will come from existing international managers, but it has not been decided from which ones.

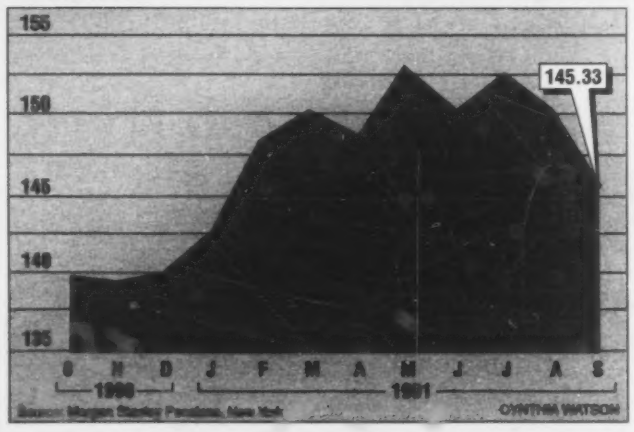
Part of the money will come from a terminated EAFE account with Daiwa International Capital Management Corp., New York.

Trustees also selected Delta Asset Management Co., Los Angeles, as a domestic equity manager. Mr. Conrad said Delta will receive about $200 million, which will come from an account with Security Pacific Investment Managers Inc., Los Angeles. Security Pacific was dropped because of personnel changes, he said.

Callan Associates, San Francisco, assisted in the selection of Delta. The Frank Russell Co., Tacoma, Wash., assisted in the selection of the international managers.

— *Steve Hemmerick*

Pension surplus index



Source: Morgan Stanley Pensions, New York CYNTHIA WATSON

FINANCING

Courier company is taken private

■ BancBoston Ventures Inc. has invested $3.65 million in CDG Holding Corp., a company formed to take Courier Dispatch Group Inc. private.

Ingoldsby, O'Connor, Altwell & Co., a Waltham, Mass.-based investment bank, initiated the transaction and worked with BancBoston in structuring and arranging the financing.

"The investments of BancBoston Ventures and other institutions will allow us to restructure the ownership of the company, which, in turn, will provide us with the opportunity for continued growth. Equally important, the change in ownership will provide us with the foundation to streamline operation, reduce costs and make selected acquisitions," said Paul R. Dean, president of Courier Dispatch, Atlanta.

Now that the company is private, BancBoston Ventures owns about 30%. Fleet Venture Partners, a unit of Fleet/Norstar Group, Providence, R.I., invested about $200 million, and owns 22% of the company. Management will remain in place, and Mr. Dean will assume the additional title of chairman of the board.

Courier is a full-service organization providing both scheduled on-call ground and air courier services. Revenue totaled $55 million in the year ended June 30.

BancBoston Capital, the venture firm's parent, and its affiliates claim to have the largest bank-sponsored mezzanine and venture capital business in New England and one of the largest in the country with more than 200 investments.

— *Marlene Givant Star*

PEOPLE

UMWA's Clark takes consulting role

■ After nearly six years on the job, Jerry N. Clark has resigned as executive director of the $5 billion-plus UMWA Health and Retirement Funds to set up his own health cost management consulting firm.

Mr. Clark said that while he enjoyed the challenge of overseeing the mine workers' benefit funds, he always had wanted to return to the health care area. His new firm, Clark Associates, will be based in Washington.

Mr. Clark joined the UMWA funds as director of research in 1974, moved to director of options in 1983 and was promoted to executive director in 1985. Under his direction, the funds reduced annual per capital health cost increases to an average of 8%, down from double-digit levels earlier.

Edward A. Day Jr., director of finance and administration for the funds, has been appointed acting executive director.

— *Joel Chernoff*

UNIONS

Pension asset protection sought

■ The $2.3 billion Bakery, Confectionery and Tobacco Workers International Union wants Klosterman's Baking Co., Cincinnati, to guarantee any losses to the company's 401(k) plan, which the union said is 100% invested with Mutual Benefit Life Insurance Co.

The union questioned the investment choices at three non-union plants, claiming the seizure of Mutual Benefit by New Jersey regulators make Klosterman's morally — if not legally — responsible for any losses. Klosterman employees could invest in a guaranteed fund, equity growth or aggressive equity funds, a short-term money market account or a real estate fund.

The baker's union wants Klosterman's Bakery to protect workers' pension pie.

"No one's looking after these people, and we feel compelled to start looking after their welfare," said Dave Durkee, director of organization at the union. The union has lost elections at the Klosterman's plants in the past.

No matter what happens in the case of Mutual Benefit, the union is looking down the road to guarantee against losses to pensioners, Mr. Durkee added.

In a letter to Kenneth Klosterman Jr., president of the company, the union called for a program to protect non-union workers' pension assets. The union proposed Klosterman's guarantee the assets; provide immediate access to assets by employees; provide employees access to loans by setting up a loan fund; and make all information on New Jersey's rehabilitation order of Mutual Benefit and the 401(k) and profit-sharing plans available to employees.

The union also distributed form letters for the employees to send to the plan administrator to get information about the pension plan and all information concerning Mutual Benefit.

Klosterman's executives did not respond to telephone calls.

— *Sabine Schramm*

ECONOMY

Marinvest exec sees relief ahead

■ Sometimes you have to leave home to appreciate it.

John C. Quinn, who returned in July after more than seven years in Hong Kong, Singapore and Tokyo to become chief executive officer and chief investment officer of Marinvest, New York, is more bullish on the American economy than most U.S.-based analysts.

He believes the economy is well on the road to recovering from a severe hangover.

The hangover, he suggests, resulted from excesses that damaged the economy in the 1980s — inflation and high interest rates early in the decade, the strong dollar in the middle of the decade and the excesses in the real estate and financial sectors.

Now "the real economy is getting better, but the financial economy may deteriorate a little further," he said earlier this month.

"The deterioration of the financial sector may hide important productivity increases," he said. "I expect significant growth in the next year or so."

Even in the financial assets, the 1990s will provide favorable results because disinflation will continue, he said.

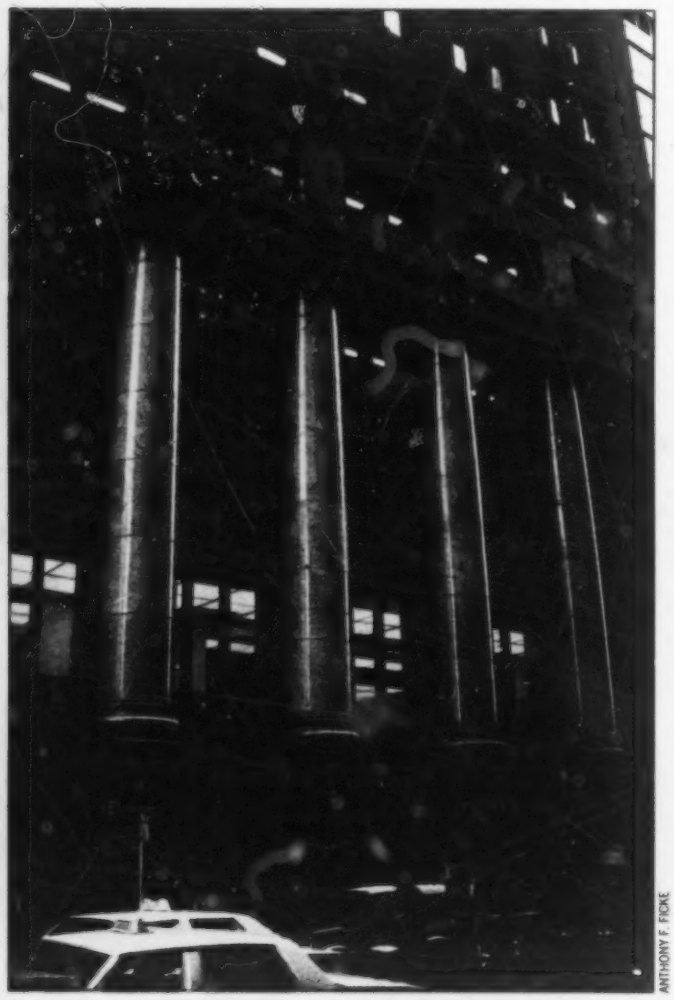
The greatest opportunities for growth, Mr. Quinn said, will belong to companies that have a global view — McDonald's Corp., Toys "R" Us Inc., Coca Cola Co., Pepsico Inc. and technology companies such as Hewlett-Packard Co. and Motorola Inc.

"American companies are going to have great success in the emerging countries because the average person in those countries aspires to the standard of living the average American already has," he said.

— *Mike Clowes*

BENEFITS

Group acts to cut FAS 106 liability



ANTHONY F. FICKE

The Bank of Montreal/Harris group, which includes Chicago's Harris Bank, expects to save $4.5 million in retiree health costs by requiring cost sharing by active employees.

■ The Bank of Montreal/Harris group of companies will save about $4.5 million under FAS 106 by altering its retiree medical plan effective Nov. 1.

Company executives estimate the liability under the Financial Accounting Standards Board's Statement 106 at $6.9 million under the new plan, vs. $11.4 million under the old plan. The bulk of the savings — $4 million — will come from requiring cost sharing by active employees ineligible for retirement.

Mary Wessel, vice president of Harris Trust and Savings Bank, Chicago, discussed the changes during a presentation to the Chicago chapter of WEB, a network of employee benefit professionals.

Although coverage remains the same, deductibles and the out-of-pocket limit will increase while co-insurance will decrease. Premiums — which used to be the same for all employees and were paid entirely by the bank for retirees older than 65 — now will be service related, meaning the longer employees work there before retiring, the less they pay. All retirees will contribute, paying an average of $7 to $35 per month.

And spousal coverage, which used to be free for retirees older than 65, now will cost $14 to $47 per month for all participants.

In addition, premiums for all retiree medical coverage now will be based on actual health care expenses for retirees. Before, they were based on expenses for active employees.

The Bank of Montreal/Harris is offering an early retirement incentive in conjunction with the announcement of the plan changes. Employees 55 or older with at least 10 years of benefit service may retiree by Oct. 31 and receive post-retirement medical benefits under the old plan, which is less costly to them. As a special enhancement, the bank will increase its contribution for employees at least 51 with at least six years of service by Nov. 1.

— Nancy K. Webman

MONEY MANAGERS

Ties that bind: Firm seals bank relationship

■ Don't tell Securities Counsel Inc. that banking has a bad name these days.

The investment advisory arm of First of America Bank Corp. and its Parkstone Group of mutual funds has renamed itself to more closely identify itself with the bank.

The new moniker, First of America Investment Corp., clearly cements the relationship begun when Securities Counsel, started in 1932 in Jackson, Mich., was bought by the Kalamazoo, Mich., bank in 1986. The investment adviser has about $800 million in tax-exempt assets under management, plus serves as adviser to the $2.8 billion Parkstone funds and the $4.5 billion bank trust department.

"The game used to be to separate the investment management culture from the bank culture through a name change," said Victor Melone, president and chief investment officer of of the former Securities Counsel.

"But that's ludicrous at this point when everyone knows banks are moving into all areas of the financial services industry. Why pretend that bank's aren't in the business?"

— Curtis Vosti

REAL ESTATE

Hotel industry slowly sinking

■ Just how bad is it in the hotel industry?

Coopers & Lybrand, in its quarterly research journal, "Coopers & Lybrand Hospitality Directions," reports an estimated $2.1 billion in hotel loans were delinquent or in the process of foreclosure as of Sept. 30, 1990. That's a 4.2% increase from 1989 despite a 2.7% drop in loans outstanding.

Hotel foreclosures more than tripled to $847 million during the first nine months of 1990, compared with the previous year.

Overall, delinquencies, foreclosures and restructured loans climbed 25.5% between the third quarter of 1988 and the third quarter of 1990.

"Weakness in the economy and declining real estate values will cause continued increases in the number and value of defaults and restructurings," said Bjorn Hanson, a C&L partner and hospitality industry consulting practice leader.

"Nearly 20% of hotels today are failing to fill half their rooms, an occupancy rate associated with severe financial losses. We expect the Resolution Trust Corp.'s current portfolio of about 155 hotels to rise if banks with loans outstanding to hotels continue to fail."

— Chuck Paustian

INVESTING

Equities, venture capital score big

■ The best-performing asset class in 1991 is expected to be U.S. equities and, over the next five years, venture capital.

That's one conclusion of the 15th annual survey of economic and capital market expectations conducted by the investment supervision consulting group at KPMG Peat Marwick, New York. Results came from a universe of 28 money managers, banks, insurance companies and the like.

Over a five-year period, U.S. and international bond returns are expected to be competitive with returns of U.S. and foreign equities. A global, multicurrency fixed-income portfolio is expected to outperform U.S. bonds over the long term while U.S. stocks are expected to outperform non-U.S. stocks over the long term.

Meanwhile, the expected equity risk premium is modest, indicating investors might not be compensated sufficiently for assuming the higher risk of stocks over bonds.

Respondents said inflation will remain subdued, while after-tax corporate profits will grow modestly over the long term. They predicted the federal budget deficit gradually will be reduced by modest amounts, and personal income and savings are expected to increase modestly over longer periods.

— Nancy K. Webman

Comparison of returns

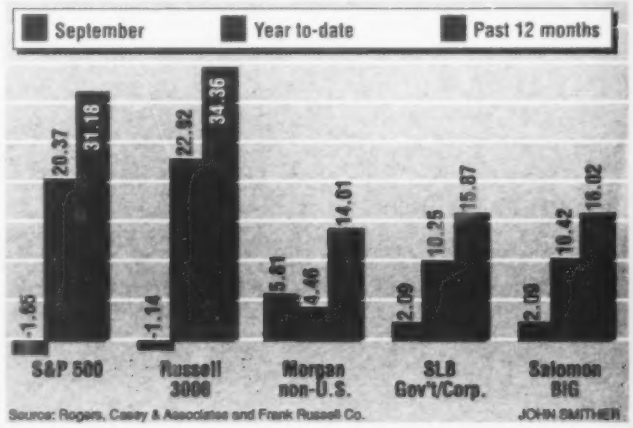
(Average value)

	1991	Next five years
Domestic equity	10.3%	10.7%
Non-U.S. stocks	8.4	10.3
Global stocks	9.9	10.2
Domestic fixed income	10.1	9.2
Non-U.S. bonds	8.3	9.4
Global bonds	9.3	9.4
Venture capital	6.9	11.6
Equity real estate	-5.4	3.1

Source: KPMG Peat Marwick, New York JOHN HALL

Pensions & Investments' indexes

The P&I monthly indexes track changes in the Standard & Poor's 500 Stock Index, Frank Russell Co.'s Russell 3000 Stock Index, the J.P. Morgan non-U.S. Government Bond Index, the Shearson Lehman Brothers Government/Corporate Bond Index and the Salomon Brothers Broad Investment Grade Bond Index.



Source: Rogers, Casey & Associates and Frank Russell Co. JOHN SMITHER

FINANCING

White knight receives just rewards

■ Polaroid Corp.'s white knight was rewarded for its good deed when the company divvied up the money remaining from its settlement in a patent battle with Eastman Kodak Co.

Some $280 million in cash and $140 million in 8% 10-year convertible debentures went to Corporate Partners, the $1.5 billion institutional limited partnership fund that provided $300 million of the financing for Polaroid's $1.1 billion stock buyback. The January 1989 buyback was used to fend off a takeover by Shamrock Holdings Inc., Roy E. Disney's investment group. Corporate Partners is managed by Lazard Freres & Co., New York.

Investors in the fund include California State Teachers' Retirement System, Sacramento; Florida State Board of Administration, Tallahassee; and Illinois State Board of Investment, Chicago.

In the original deal, CP received 10-year securities redeemable after seven years. Because Lazard knew Polaroid could receive a sizable settlement from Kodak before then, the firm negotiated a special call provision "in which Polaroid could take us out at a high rate of return," said Lester Pollack, senior managing director, Corporate Partners.

"Earnings per share and net income will go up as a result of the transaction. That makes it good for Corporate Partners to have a continuing interest in the company," said Mr. Pollack.

CP earned a return of close to 19% on its $300 million Polaroid investment, according to Mr. Pollack.

For Polaroid, the move reduces dilution associated with the payment-in-kind dividend that was paid to CP and eliminates the preferred cash dividend payout.

— Marlene Givant Star

401(k) 'clarification' a crossroads

Regulations changed retirement map

By Curtis Vosti

The employee benefit that has changed the structure of retirement income provision in the United States was created by accident, rather than by specific design.

The Internal Revenue Service issued regulations specifically allowing 401(k) salary reduction plans Nov. 10, 1981, paving the way for them to become the most popular employee benefit plan in the country during the next 10 years.

But the regulations grew out of part of the Internal Revenue Code enacted three years earlier to clarify that cash or deferred bonus plans — not pre-tax salary reduction plans — could be qualified plans.

"It was really an unconscious piece of legislation, but now it's Main Street America," said Dano Bartolai, principal with William M. Mercer Inc., Chicago.

"In those days, no one ever dreamed that 401(k) applied to anything but those (after-tax cash or deferred) types of pension plans," said Harry Gross, a partner with the Fort Lee, N.J., benefits consulting firm Kwasha Lipton.

Benefits consultant Ted Benna had grasped the concept in 1980, but had a hard time peddling the idea of a pre-tax plan until after the IRS regulations were published. *(See related story on this page.)*

"It was really just a technical correction," said Richard Pallan, senior managing director of The Putnam Cos., Boston. "But the companies that adopted 401(k) were the pioneers in the face of uncertain government regulation."

Now, as 401(k) plans enter their second decade, the phenomenal growth has in itself become a cause of increasing debate over their proper role. How do plan sponsors and individuals best use them? Where do they fit into the traditional concept of an individual's retirement income needs? What role will or should the government play in their development?

The answers that plan sponsors, individuals and the government give to these pertinent concerns will go a long way toward determining how the plans develop in the next 10 years.

Between 1984 and August 1991, the number of 401(k) plans has increased 150%, according to Buck Consultants Inc., New York, and the average participation rate has grown steadily to 74% from 62%.

Approximately 12 million people, or 14% of the private work force, are putting money into these plans, according to a 1989 report from the Social Security Administration.

At first, however, 401(k) growth came from the after-tax plans that had been waiting for the IRS clarification.

"In the early years, it was a no-brainer way to take after-tax plans and change them into pre-tax plans," recalled Mr. Bartolai.

"Almost all of them converted," said Susan Koralik, a partner with Hewitt Associates, Lincolnshire, Ill. "When it first came out, we were shocked, and then pleasantly surprised that the government would allow pre-tax contributions. And our clients were pleasantly surprised."

The plans were certainly enticing. An employee could not only use salary reduction, but also might get a company matching contribution on part of the savings and initially, at least, have fairly easy access to the account.

"It's the first time we've succeeded in getting the rank-and-file employees to save for retirement," said Edward Burrows, president of Pentad Corp., Waltham, Mass., and former president of the American Society of Pension Actuaries. "Contrasted with (individual retirement accounts), it was an outstanding savings vehicle. I don't think anyone had any inkling of the popularity that 401(k)s came to achieve."

The popularity also was fed by the ability of employees to direct their investments. As the plans grew in popularity, more options became available. Mutual funds, with their abilities to offer plan administration, toll-free phone service and numerous investment choices, became a dominant provider.

"In the old days, it was unusual to have more than two (choices), tops," said Mercer's Mr. Bartolai.

In 1989, according to the Department of Labor, 90% of plans with employee contributions allowed employees to direct their investments, and 73% of those allowed more than two choices.

And the choice of most employees became insurance company contracts. The onset of the plans fed into the explosion in the GIC market that took place in the late 1970s, when rates were in the double digits.

"401(k) provided an opportunity for insurance companies, who already had full-service capabilities in place and the guaranteed investment contracts, with their high rates, to make the plans successful," said James Hiner, a principal with Mercer, Chicago, who formerly worked in the in-

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JONATHAN WILSON

Ted Benna worked for almost two years before his 401(k) plan won IRS approval.

Creator faced long struggle

By Curtis Vosti

Ten years ago, Ted Benna chose a lonely path that would become a much-traveled road.

It seems so common now, even trendy. But it took Mr. Benna, a benefits consultant for the Newton, Pa.-based Johnson Cos., almost two years — until Nov. 10, 1981 — to get formal IRS sanction for his novel plan design based on the new, 401(k) section of the Tax Code added with The Revenue Act of 1978.

"I knew it was there, many people knew it was there, but it was unknown how it could be used," Mr. Benna says today in recollection of the impact of Section 401(k).

The idea came to him in January 1980, he has written, in response to prayer. He was working at home on a Saturday afternoon, mulling a new design for a bank client who was looking to transfer a cash bonus plan to a deferred profit-sharing plan.

He wanted features familiar today, but a cautious combination then — pre-tax salary reduction, company matches, employee contributions, high participation rates from even the lowest-paying workers and a more equitable distribution of benefits.

"I thought new tax savings alone would not be sufficient incentive for most employees to tie up money in a long-term investment plan," he said. "So I structured the plan to include matching contributions from the employer as an additional incentive to increased participation."

He packaged the product, calling it "Cash-Op." He knocked on doors, but not many were answered. "Some were concerned that the plans would be killed once it became clear what the revenue impact was," he said.

At the time, the concept of employee savings was attractive. Candidate and then President Ronald Reagan had been stressing the need to encourage personal saving through tax-deferred individual retirement accounts, known popularly as IRAs. Payroll deductions were allowed in 1981.

"We told them, 'You don't need to do that, there's something already there that's better than a payroll-deduction IRA,' " Mr.

See **Benna** *on page 24*

TED FUKA

Sponsors moved to fortify GIC selection

By Fred Williams

Sponsors of the largest defined contribution plans generally are comfortable with the safety of GIC issuers in their portfolio, but more than half have strengthened the GIC selection process in the past few months following the upheaval in the insurance industry.

The results of a *Pensions & Investments* telephone survey of more than 100 of the largest GIC holders indicate 57% of large plans have modified their GIC selection process in the aftermath of recent problems plaguing the insurance industry. Most respondents said they either have increased diversification standards by selecting a wider variety of carriers (45%) or by selecting carriers with higher credit quality (36%).

The survey — based on responses from 75 plan sponsors — was conducted by *P&I* during September and October in conjunction with Jeremy Gold Pensions, New York, and Spectrum Funding Corp., Long Beach, Calif.

Plan sponsors indicated almost unanimously that they were comfortable with the safety and creditworthiness of most contracts in their portfolios. However, 33% of the respondents said they were uncertain about the safety and creditworthiness of a small percentage of their holdings, usually less than 5% of the portfolio.

Some 91% of survey respondents said they are aware of the existence of a secondary market for GICs or the possibility of negotiating contract redemptions with issuers.

Murray Becker, principal with Becker & Rooney Inc., a Teaneck, N.J., GIC consulting firm that counts as clients some of the largest plan sponsors, said the concept of a secondary market has been tried but failed to catch on.

"The secondary market idea is of very limited value to begin with. . . . In a defined contribution plan most contracts are benefit responsive, and therefore you don't know what you are selling and insurance companies almost totally refuse to recognize assignments (of contracts). I've never had any client with any luck in a secondary market," said Mr. Becker.

"In theory you can do something like that; in practice no one does it. . . . As far as I'm aware it's not being done on any scale."

In a related question, 67% of respondents indicated they were aware some plan sponsors had purchased financial guarantees on GICs from a third-party guarantor to handle obligations in the event of a carrier default. Forty-nine percent indicated they would consider such a transaction.

"It may be possible to obtain a financial guarantee, but again this is not very practical," said Mr. Becker. "These ideas exist but are not useful in solving problems."

The use of synthetic or alternative contracts as a substitute for insurance contracts appears to be in far wider use than anticipated, as 60% of respondents said they

See **GICs** *on page 29*

Conservatism rules roost

Surveys say participants avoid risk, like to play it safe

By Curtis Vosti

Participants in 401(k) plans describe themselves as conservative investors who continue to prefer directing their investments toward insurance and bank contracts, according to two recent surveys.

While the surveys by John Hancock Financial Services Inc., Boston, and A. Foster Higgins & Co. Inc., Princeton, N.J., tend to confirm commonly held beliefs about 401(k) plan participants, they nevertheless offer insights into participant investment attitudes in the fast-growing and dynamic field of 401(k) plans.

The preference for less risky and lower returning investments, such as guaranteed investment contracts, has been a concern to many plan sponsors and benefits consultants because of its risk of providing lower-than-expected standards of retirement living.

Only 21% of those responding to the Hancock survey said they were willing to take risks with their accounts to get a better return. Forty-three percent disagreed.

The Hancock survey posed a number of statements, and participants were asked to indicate if they agreed with, disagreed with or were neutral about the statement. Hancock surveyed 946 individuals, mostly from larger corporations, who had contributed to a defined contribution plan having more than one investment option, one of which was a guaranteed fund.

More than eight out of 10 agreed with the statement, "I certainly am more conservative than experimental when it comes to financial matters."

The Foster Higgins survey indicated 58% of employee 401(k) assets were invested in insurance and bank contracts. Its results were based on answers from 516 employees in 401(k) plans. The assets reflected not only employee contributions but also company matches.

Company stock had 22% of employee 401(k) assets. Money market and equity funds each drew 21%, followed in order of preference by balanced funds, bond funds, government obligations, life insurance and real estate funds.

According to the Hancock survey, 80% of the respondents said they like to keep their financial affairs uncomplicated, with 19% agreeing with the statement that they need "very little advice when making financial or investment decisions."

Only 7% agreed with the statement, "the only way to succeed in today's financial world is to let professionals manage your money," and 26% agreed with, "what I really want is someone else to handle my finances for me with my best interests at heart." Forty-three percent disagreed with that statement.

"The survey clearly confirms that participants in 401(k) plans like to have control over their assets," said Joe LoRusso, second vice president of the Hancock investment and pension group.

Forty-three percent agreed with "once I decided how to invest my retirement savings I leave it alone and don't move it."

"Daily valuation and switching is not for everybody," Mr. LoRusso said. "They don't tend to want to move their money around."

Despite the popularity of participant control, sponsors are concerned participants don't understand the risk and reward trade-offs of various investments. While many sponsors think they must tread a fine line between offering investment information and recommendations, communication efforts are being stressed.

The Hancock survey attempted to determine the usefulness to employees of those communication efforts.

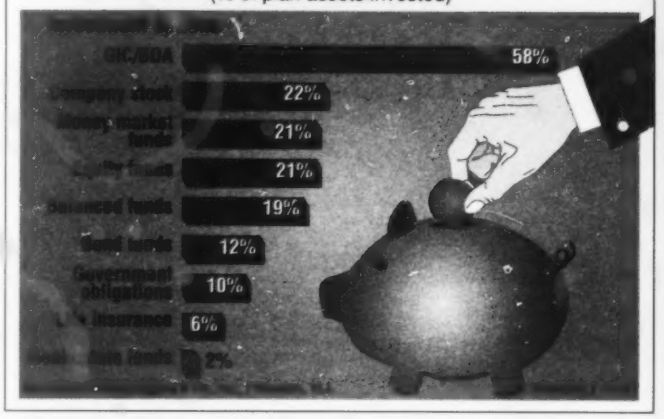
On a scale of 1 (poor) to 5 (excellent), 30% of survey participants gave a grade of 3 to the usefulness of employer-provided information about how to make good investment decisions for the retirement plan. Twenty-nine percent gave a grade of 4, while 16% graded as it as excellent, 15% gave it a 2 and 9% said it was poor.

When asked to list three things an employer could do to improve the content of the investment information, 47% said provide more information about the historical

See **Risk** *on page 28*

Employee savings plan 1991 allocations

(% of plan assets invested)



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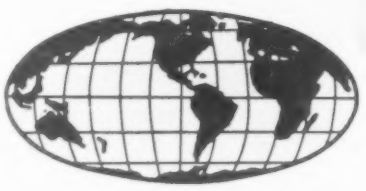

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Crossroad

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surance industry.

"Add to that the then-perceptions about the strength of the insurance companies, the guaranteed rate, and it's no wonder it proved successful," he said.

According to a recent study by A. S. Foster Higgins & Co. Inc., GICs and bank investment contracts are drawing 58% of both employer- and employee-contributed 401(k) assets. (The number likely would be higher if employer matches — which often are company stock only — were excluded.)

A major concern among plan sponsors and others is the choices employees make with their assets. The much-publicized problems

with insurance company failures, exacerbated by the participants' high concentration in those investments, have many concerned about the standard of retirement living the participants are setting for themselves.

"The fundamental difference (between 401(k)s and defined benefit plans) is that the investment experience is borne by the individuals," said Douglas Edwards, a consultant with Foster Higgins in Princeton, N.J. "Large pension plans can better absorb market fluctuations."

Others, including Karen Ferguson, director of the Pension Rights Center in Washington, say the problem with 401(k)s is companies have been more than willing to abrogate their historical role as pension provider in the name of lower cost.

"Retirement benefits is where a paternalistic approach is common sense," she said.

Instead of improving their defined benefit plans as they had in the past, she said, many employers are funneling retirement dollars into the 401(k)s as matching contributions for those employees most likely to save anyway.

Fewer than 9% of all private-sector workers with annual earnings of $25,000 put money into these plans into 1988, she said, whereas 22% of those earning more than $50,000 contributed. In dollar terms, the low-paid workers represented only 2% of employee contributions, Ms. Ferguson said.

But Mercer's Mr. Bartolai says 401(k) plans offer the tax and company-match advantages that make any savings by the lower-paid employees worthwhile, especially considering a defined benefit plan often doesn't pay off for a young, mobile worker.

"To them, the defined benefit plan means nearly nothing," he said. "It only pays off for them if they work there the rest of their lives."

And the flexibility of the 401(k) structure doesn't prohibit paternalism. One Western U.S. plan sponsor, who asked not to be identified, said his plan looks out for its participants' best interests. It has never offered its employees a GIC option because of its concern over accumulation risk. "It's not the way to save for retirement," he said.

Traditional common sense had it that retirees needed three sources for retirement income: a company plan, Social Security and their own savings. With the emphasis on 401(k) as the company plan, some analysts are worried.

"If as a society, we think that a three-legged stool is a two-legged stool, that's fine," said Pentad's Mr. Burrows. "But 401(k)s are not a substitute for a (defined benefit) pension plan."

The government, the unintended instigator of the popular plans, continuously tries to tinker with the Frankenstein it created. Realizing all of the salary reductions it wasn't able to tax, the Reagan administration tried twice in 1986 to abolish the plans. Public outrage killed those efforts, but there is always the possibility they will resurface.

"It's always going to be a target for the federal government be-

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Crossroad

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cause it's such a revenue loser altogether," said Mr. Edwards of Foster Higgins.

Nonetheless, Congress continues to grapple with the issues raised with the use of the 401(k).

"It became very clear that Congress never intended (the salary reduction plan) to have the broad implications it has today," said Kwasha Lipton's Mr. Gross.

The tinkering continues today on many fronts. Concern about the disputed tendency of plan participants to cash out when they change jobs has led to calls for greater restrictions on the ability to get a lump sum beyond the 10% tax surcharge enacted in 1986.

The Bush administration is pushing efforts to encourage wider 401(k) use through easing discrimination testing for smaller companies.

Critics say the proposal offers token benefits to rank-and-file workers in return for elimination of discrimination testing for highly paid executives.

The evolution of discrimination testing has proved to be an irritant to all sizes of 401(k) plans, even as the maximum deductions have increased to $8,400 from an initial $7,000.

Whereas Foster Higgins' Mr. Edwards said it used to be very unusual to find a plan that failed discrimination testing, Mercer's Mr. Bartolai said two out of three plans are having trouble passing the test today because the lower-paid workers aren't participating and/or contributing at the levels that the highly compensated are.

The plans are getting their share of attention from regulators. The Department of Labor has proposed guidelines for investment options to encourage a broad range of choices for plan participants, and the Financial Accounting Standards Board is studying whether to require plans to fairly value GIC investments.

401(k)s also have been increasingly wooed by investment managers and other service providers. Product innovation, particularly in the employee communication, service bundling, plan design and investment management fields, continues at a rapid pace.

And with the ability of 401(k) plans to adapt themselves to the delivery of health benefits, more corporate executives are are looking at them as an aid in containing medical costs.

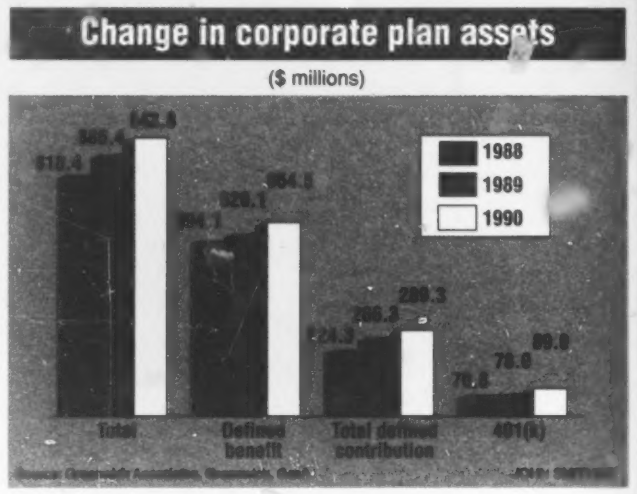
All this portends continued change for 401(k) plans.

"One of the big pushes we will see in the 401(k) plans is the change in focus to a retirement vehicle," said Mr. Edwards of Foster Higgins. "Another is that over the next couple of years, the effort will be to make participants smarter investors. It's also in the plan sponsors' best interests because it takes the pressure off them to increase funding or benefit levels of the defined benefit plans."

There is no doubt 401(k) plans will continue to grow, despite the issues their popularity raises. The increasing responsibilities of plan participants to self-direct their retirement incomes have led in recent months to an urgent focus on educating them in the wisdom of specific investment practices.

As with the evolution of all policies, the government's actions, intended or not, will play a major role in plan sponsors and participants being able to meet the goals of retirement benefits. New issues are bound to develop, but the adaptability of the 401(k) structure will help it face the challenges ahead, industry observers say.

It is still a young industry, and as such, will face the normal growing pains of any 10-year-old. ■



Risk

Continued from page 21

returns of the available options; 47% also called for clearer explanations of the pros and cons of each investment choice; and 45% said a clearer and simple explanation of what each investment choice is.

"To me it demonstrates people want more information on how their investments work," Mr. LoRusso said.

Ten percent said no improvements were needed and 30% said they could use better information about how much money would be needed to live on in retirement.

"We have to get people to think a little more about their investment horizons," Mr. LoRusso said. "The implications are very serious. How can we in English best explain how these work without confusing them?"

A Hancock commentary released with the survey said participants indicated their top choices for delivery of investment information were written material and knowledgeable people they could contact. "Participants' negligible level of interest in the video format could perhaps be attributed to a low level of comfort at present with this medium as an educational tool," the commentary said. ■

HARRIS CONVERSATIONS FOR THE 90s:

PLAYING ON THE SAME SIDE

A SPECIAL DISCUSSION WITH DR. STANLEY S. GRYSKIEWICZ
and a select group of business executives.

Playing on the same side of the corporate team is vital when it comes to innovation, whether creating a new product or developing new ways of thinking and managing within a company.

Yet too often, corporations separate researchers, designers, and planners from those who turn their visions into reality. Thus millions of dollars are wasted on concepts that are instantly recognized as unworkable by those who must implement them.

Harris Master Trust Services and Harris Investment Management, Inc., recently invited Dr. Stanley Gryskiewicz of the Center for Creative Leadership to conduct a workshop on this issue for a select group of the bank's customers.

Dr. Gryskiewicz focused on how the creative and team-building processes are affected when planners and implementors are separated. The following recounts several of his key principles for managing innovation:

Frequently you are not certain exactly what it is you are trying to accomplish, let alone how to do it.

Implementors who are kept out of the planning process often have high anxiety levels. They worry about what task they'll be held responsible for and whether they'll be able to accomplish it.

This anxiety can play itself out in destructive ways. For example, I've had workshops in which planners and implementors are supposed to work together to assemble a puzzle of a hollow square. Some planners put together the entire puzzle, except for one piece, never telling the implementors about the puzzle or what their job will be. So when the planners finally tell the implementors to put the last piece in the puzzle, the implementors can't believe that's all they have to do. They don't trust the planners—and simply walk away without completing the puzzle. So the whole team fails at the task.

Even in simple tasks, communication can be a problem, but participation improves communication.

When you hold back information or keep implementors in the dark, emotions like anger and anxiety will proliferate. That emotion does not simply go away, either.

Instead, it will hide, then show itself later in other projects involving the same people. Then you'll have to solve the so-called people problems before you can do any meaningful work on the task. So you can't think of negative feelings as an unavoidable by-product of the planning/implementing process. You must resolve these feelings or a project could be sabotaged by them.

The earlier in the planning the implementors are involved, the more effective is the process.

People often tell me that while this sounds like a good idea, it's unworkable in business settings. They say sometimes you just can't provide the big picture to the implementors.

I say, in those situations, you need to redefine who your implementors are. There's probably a select group of them that could and should know more—especially when you need their commitment to ensure a quick, high-quality turnaround.

The line between competing as a leader and cooperating as a colleague is frequently so fuzzy that it is nonexistent.

A single team consists of planners and implementors. But we tend to think in terms of separate, often competing teams, just because members of one team have different labels. We may even encourage these divisions because they seem to make our jobs, and our selves, more important, more privileged.

Assumed constraints are usually more restrictive than actual constraints; and what is clever, creative, and effective to one person may be distasteful, devious, and cheating to another.

These two principles often are interconnected. For instance, in the hollow square puzzle I mentioned earlier, planners sometimes draw a key to the puzzle. The rules say simply that the planners can't show the original puzzle key to the implementors. So, is redrawing the key cheating or an innovation?

Disagreements like these often crop up when you are pushing boundaries and limits that may no longer be appropriate. So be certain that team members agree about what is legal, ethical, and finally, what is right.

But be willing to test the limits. Your current safe boundaries were once unknown frontiers. It may be time to invoke the spirit of the pioneer, the innovator, and move ahead.

This is the fifth in a series of Harris Conversations for the 90s. Other topical roundtables that can help our Harris customers be more competitive will follow.

To receive a longer version of this workshop discussion with Dr. Stanley Gryskiewicz, call Harris Bank at (312) 461-5554.

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